

poses the President through the Secretary of State and the Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs, shall negotiate multilateral treaties, conventions, resolutions, or other agreements, and formulate, present, or support proposals at the United Nations and other appropriate international forums and shall report to the Congress periodically on efforts to arrive at such agreements.

**(b) Assistance to developing countries**

The Administrator, in consultation with the Secretary of State, shall support global participation in the Montreal Protocol by providing technical and financial assistance to developing countries that are Parties to the Montreal Protocol and operating under article 5 of the Protocol. There are authorized to be appropriated not more than \$30,000,000 to carry out this section in fiscal years 1991, 1992 and 1993 and such sums as may be necessary in fiscal years 1994 and 1995. If China and India become Parties to the Montreal Protocol, there are authorized to be appropriated not more than an additional \$30,000,000 to carry out this section in fiscal years 1991, 1992, and 1993.

(July 14, 1955, ch. 360, title VI, § 617, as added Pub. L. 101-549, title VI, § 602(a), Nov. 15, 1990, 104 Stat. 2669.)

**AUTHORITY OF SECRETARY OF STATE**

Except as otherwise provided, Secretary of State to have and exercise any authority vested by law in any official or office of Department of State and references to such officials or offices deemed to refer to Secretary of State or Department of State, as appropriate, see section 2651a of Title 22, Foreign Relations and Intercourse, and section 161(d) of Pub. L. 103-236, set out as a note under section 2651a of Title 22.

**§ 7671q. Miscellaneous provisions**

For purposes of section 7416 of this title, requirements concerning the areas addressed by this subchapter for the protection of the stratosphere against ozone layer depletion shall be treated as requirements for the control and abatement of air pollution. For purposes of section 7418 of this title, the requirements of this subchapter and corresponding State, interstate, and local requirements, administrative authority, and process, and sanctions respecting the protection of the stratospheric ozone layer shall be treated as requirements for the control and abatement of air pollution within the meaning of section 7418 of this title.

(July 14, 1955, ch. 360, title VI, § 618, as added Pub. L. 101-549, title VI, § 602(a), Nov. 15, 1990, 104 Stat. 2670.)

**CHAPTER 86—EARTHQUAKE HAZARDS  
REDUCTION**

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**§ 7701. Congressional findings**

The Congress finds and declares the following:

(1) All 50 States are vulnerable to the hazards of earthquakes, and at least 39 of them are subject to major or moderate seismic risk, including Alaska, California, Hawaii, Illinois, Massachusetts, Missouri, Montana, Nevada, New Jersey, New York, South Carolina, Utah, and Washington. A large portion of the population of the United States lives in areas vulnerable to earthquake hazards.

(2) Earthquakes have caused, and can cause in the future, enormous loss of life, injury, destruction of property, and economic and social disruption. With respect to future earthquakes, such loss, destruction, and disruption can be substantially reduced through the development and implementation of earthquake hazards reduction measures, including (A) improved design and construction methods and practices, (B) land-use controls and redevelopment, (C) prediction techniques and early-warning systems, (D) coordinated emergency preparedness plans, and (E) public education and involvement programs.

(3) An expertly staffed and adequately financed earthquake hazards reduction program, based on Federal, State, local, and private research, planning, decisionmaking, and contributions would reduce the risk of such loss, destruction, and disruption in seismic areas by an amount far greater than the cost of such program.

(4) A well-funded seismological research program in earthquake prediction could provide data adequate for the design, of an operational system that could predict accurately the time, place, magnitude, and physical effects of earthquakes in selected areas of the United States.

(5) The geological study of active faults and features can reveal how recently and how frequently major earthquakes have occurred on those faults and how much risk they pose. Such long-term seismic risk assessments are needed in virtually every aspect of earthquake hazards management, whether emergency planning, public regulation, detailed building design, insurance rating, or investment decision.

(6) The vulnerability of buildings, lifelines, public works, and industrial and emergency facilities can be reduced through proper earthquake resistant design and construction practices. The economy and efficacy of such procedures can be substantially increased through research and development.

(7) Programs and practices of departments and agencies of the United States are important to the communities they serve; some functions, such as emergency communications

and national defense, and lifelines, such as dams, bridges, and public works, must remain in service during and after an earthquake. Federally owned, operated, and influenced structures and lifelines should serve as models for how to reduce and minimize hazards to the community.

(8) The implementation of earthquake hazards reduction measures would, as an added benefit, also reduce the risk of loss, destruction, and disruption from other natural hazards and manmade hazards, including hurricanes, tornadoes, accidents, explosions, landslides, building and structural cave-ins, and fires.

(9) Reduction of loss, destruction, and disruption from earthquakes will depend on the actions of individuals, and organizations in the private sector and governmental units at Federal, State, and local levels. The current capability to transfer knowledge and information to these sectors is insufficient. Improved mechanisms are needed to translate existing information and research findings into reasonable and usable specifications, criteria, and practices so that individuals, organizations, and governmental units may make informed decisions and take appropriate actions.

(10) Severe earthquakes are a worldwide problem. Since damaging earthquakes occur infrequently in any one nation, international cooperation is desirable for mutual learning from limited experiences.

(11) An effective Federal program in earthquake hazards reduction will require input from and review by persons outside the Federal Government expert in the sciences of earthquake hazards reduction and in the practical application of earthquake hazards reduction measures.

(Pub. L. 95-124, § 2, Oct. 7, 1977, 91 Stat. 1098; Pub. L. 101-614, § 2, Nov. 16, 1990, 104 Stat. 3231.)

#### AMENDMENTS

1990—Pars. (5) to (11). Pub. L. 101-614 added pars. (5) to (7), struck out former pars. (5) and (6), and redesignated former pars. (7) to (10) as (8) to (11), respectively. Prior to amendment, pars. (5) and (6) read as follows:

“(5) An operational earthquake prediction system can produce significant social, economic, legal, and political consequences.

“(6) There is a scientific basis for hypothesizing that major earthquakes may be moderated, in at least some seismic areas, by application of the findings of earthquake control and seismological research.”

#### SHORT TITLE OF 2004 AMENDMENT

Pub. L. 108-360, title I, §101, Oct. 25, 2004, 118 Stat. 1668, provided that: “This title [amending sections 7703, 7704, and 7706 of this title] may be cited as the ‘National Earthquake Hazards Reduction Program Reauthorization Act of 2004’.”

#### SHORT TITLE OF 2000 AMENDMENT

Pub. L. 106-503, title II, §201, Nov. 13, 2000, 114 Stat. 2304, provided that: “This title [enacting sections 7707 to 7709 of this title, amending sections 7703, 7704, and 7706 of this title, repealing section 7705d of this title, enacting provisions set out as a note under this section, and amending provisions set out as a note under section 7704 of this title] may be cited as the ‘Earthquake Hazards Reduction Authorization Act of 2000’.”

#### SHORT TITLE OF 1990 AMENDMENT

Section 1 of Pub. L. 101-614 provided that: “This Act [enacting sections 7705a to 7705e, amending this section and sections 7702 to 7705, and 7706 of this title, and enacting provisions set out as notes under sections 7704, 7705b, and 7705e of this title] may be cited as the ‘National Earthquake Hazards Reduction Program Reauthorization Act’.”

#### SHORT TITLE

Section 1 of Pub. L. 95-124 provided: “That this Act [enacting this chapter] may be cited as the ‘Earthquake Hazards Reduction Act of 1977’.”

#### DELEGATION OF FUNCTIONS

Functions of President under Earthquake Hazards Reduction Act of 1977 delegated, transferred, or reassigned to Secretary of Homeland Security pursuant to sections 1-104 and 4-204 of Ex. Ord. No. 12148, July 20, 1979, 44 F.R. 43239, as amended, set out as a note under section 5195 of this title.

#### REPORT ON AT-RISK POPULATIONS

Pub. L. 106-503, title II, §207, Nov. 13, 2000, 114 Stat. 2307, required the Director of the Federal Emergency Management Agency to transmit to Congress a report no later than 1 year after Nov. 13, 2000, describing the elements of the National Earthquake Hazards Reduction Program that specifically addressed the needs of at-risk populations.

#### § 7702. Congressional statement of purpose

It is the purpose of the Congress in this chapter to reduce the risks of life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. The objectives of such program shall include—

(1) the education of the public, including State and local officials, as to earthquake phenomena, the identification of locations and structures which are especially susceptible to earthquake damage, ways to reduce the adverse consequences of an earthquake, and related matters;

(2) the development of technologically and economically feasible design and construction methods and procedures to make new and existing structures, in areas of seismic risk, earthquake resistant, giving priority to the development of such methods and procedures for power generating plants, dams, hospitals, schools, public utilities and other lifelines, public safety structures, high occupancy buildings, and other structures which are especially needed in time of disaster;

(3) the implementation to the greatest extent practicable, in all areas of high or moderate seismic risk, of a system (including personnel, technology, and procedures) for predicting damaging earthquakes and for identifying, evaluating, and accurately characterizing seismic hazards;

(4) the development, publication, and promotion, in conjunction with State and local officials and professional organizations, of model building codes and other means to encourage consideration of information about seismic risk in making decisions about land-use policy and construction activity;

(5) the development, in areas of seismic risk, of improved understanding of, and capability with respect to, earthquake-related issues, in-

cluding methods of mitigating the risks from earthquakes, planning to prevent such risks, disseminating warnings of earthquakes, organization emergency services, and planning for reconstruction and redevelopment after an earthquake;

(6) the development of ways to increase the use of existing scientific and engineering knowledge to mitigate earthquake hazards; and

(7) the development of ways to assure the availability of affordable earthquake insurance.

(Pub. L. 95-124, §3, Oct. 7, 1977, 91 Stat. 1099; Pub. L. 101-614, §3, Nov. 16, 1990, 104 Stat. 3231.)

#### AMENDMENTS

1990—Pub. L. 101-614 inserted sentence at end, listing objectives of program.

### § 7703. Definitions

As used in this chapter, unless the context otherwise requires:

(1) The term “includes” and variants thereof should be read as if the phrase “but is not limited to” were also set forth.

(2) The term “Program” means the National Earthquake Hazards Reduction Program established under section 7704 of this title.

(3) The term “seismic” and variants thereof mean having to do with, or caused by earthquakes.

(4) The term “State” means each of the States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Mariana Islands, and any other territory or possession of the United States.

(5) The term “United States” means, when used in a geographical sense, all of the States as defined in paragraph (4) of this section.

(6) The term “lifelines” means public works and utilities, including transportation facilities and infrastructure, oil and gas pipelines, electrical power and communication facilities and infrastructure, and water supply and sewage treatment facilities.

(7) The term “Program agencies” means the Federal Emergency Management Agency, the United States Geological Survey, the National Science Foundation, and the National Institute of Standards and Technology.

(8) The term “Interagency Coordinating Committee” means the Interagency Coordinating Committee on Earthquake Hazards Reduction established under section 7704(a) of this title.

(9) The term “Advisory Committee” means the Advisory Committee established under section 7704(a)(5) of this title.

(Pub. L. 95-124, §4, Oct. 7, 1977, 91 Stat. 1099; Pub. L. 101-614, §4, Nov. 16, 1990, 104 Stat. 3232; Pub. L. 106-503, title II, §209, Nov. 13, 2000, 114 Stat. 2308; Pub. L. 108-360, title I, §102, Oct. 25, 2004, 118 Stat. 1668.)

#### AMENDMENTS

2004—Pars. (8), (9). Pub. L. 108-360 added pars. (8) and (9).

2000—Par. (6). Pub. L. 106-503 inserted “and infrastructure” after “communication facilities”.

1990—Par. (2). Pub. L. 101-614, §4(1), amended par. (2) generally. Prior to amendment, par. (2) read as follows: “The term ‘program’ means the earthquake hazards reduction program established under section 7704 of this title.”

Pars. (6), (7). Pub. L. 101-614, §4(2), added pars. (6) and (7).

#### TRANSFER OF FUNCTIONS

For transfer of all functions, personnel, assets, components, authorities, grant programs, and liabilities of the Federal Emergency Management Agency, including the functions of the Under Secretary for Federal Emergency Management relating thereto, to the Federal Emergency Management Agency, see section 315(a)(1) of Title 6, Domestic Security.

For transfer of functions, personnel, assets, and liabilities of the Federal Emergency Management Agency, including the functions of the Director of the Federal Emergency Management Agency relating thereto, to the Secretary of Homeland Security, and for treatment of related references, see former section 313(1) and sections 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

### § 7704. National Earthquake Hazards Reduction Program

#### (a) Establishment

##### (1) In general

There is established the National Earthquake Hazards Reduction Program.

##### (2) Program activities

The activities of the Program shall be designed to—

(A) develop effective measures for earthquake hazards reduction;

(B) promote the adoption of earthquake hazards reduction measures by Federal, State, and local governments, national standards and model code organizations, architects and engineers, building owners, and others with a role in planning and constructing buildings, structures, and lifelines through—

(i) grants, contracts, cooperative agreements, and technical assistance;

(ii) development of standards, guidelines, and voluntary consensus codes for earthquake hazards reduction for buildings, structures, and lifelines;

(iii) development and maintenance of a repository of information, including technical data, on seismic risk and hazards reduction; and

(C) improve the understanding of earthquakes and their effects on communities, buildings, structures, and lifelines, through interdisciplinary research that involves engineering, natural sciences, and social, economic, and decision sciences; and

(D) develop, operate, and maintain an Advanced National Seismic Research and Monitoring System established under section 7707 of this title, the George E. Brown, Jr. Network for Earthquake Engineering Simulation established under section 7708 of this title, and the Global Seismographic Network.

**(3) Interagency Coordinating Committee on Earthquake Hazards Reduction**

**(A) In general**

There is established an Interagency Coordinating Committee on Earthquake Hazards Reduction chaired by the Director of the National Institute of Standards and Technology (referred to in this subsection as the “Director”).

**(B) Membership**

The committee shall be composed of the directors of—

- (i) the Federal Emergency Management Agency;
- (ii) the United States Geological Survey;
- (iii) the National Science Foundation;
- (iv) the Office of Science and Technology Policy; and
- (v) the Office of Management and Budget.

**(C) Meetings**

The Committee shall meet not less than 3 times a year at the call of the Director.

**(D) Purpose and duties**

The Interagency Coordinating Committee shall oversee the planning, management, and coordination of the Program. The Interagency Coordinating Committee shall—

- (i) develop, not later than 6 months after October 25, 2004, and update periodically—
  - (I) a strategic plan that establishes goals and priorities for the Program activities described under subsection (a)(2) of this section; and
  - (II) a detailed management plan to implement such strategic plan; and
- (ii) develop a coordinated interagency budget for the Program that will ensure appropriate balance among the Program activities described under subsection (a)(2) of this section, and, in accordance with the plans developed under clause (i), submit such budget to the Director of the Office of Management and Budget at the time designated by that office for agencies to submit annual budgets.

**(4) Annual report**

The Interagency Coordinating Committee shall transmit, at the time of the President’s budget request to Congress, an annual report to the Committee on Science and the Committee on Resources of the House of Representatives, and the Committee on Commerce, Science, and Transportation of the Senate. Such report shall include—

- (A) the Program budget for the current fiscal year for each agency that participates in the Program, and for each major goal established for the Program activities under subparagraph (3)(A);
- (B) the proposed Program budget for the next fiscal year for each agency that participates in the Program, and for each major goal established for the Program activities under subparagraph (3)(A);
- (C) a description of the activities and results of the Program during the previous

year, including an assessment of the effectiveness of the Program in furthering the goals established in the strategic plan under (3)(A)<sup>1</sup>;

(D) a description of the extent to which the Program has incorporated the recommendations of the Advisory Committee;

(E) a description of activities, including budgets for the current fiscal year and proposed budgets for the next fiscal year, that are carried out by Program agencies and contribute to the Program, but are not included in the Program; and

(F) a description of the activities, including budgets for the current fiscal year and proposed budgets for the following fiscal year, related to the grant program carried out under subsection (b)(2)(A)(i) of this section.

**(5) Advisory Committee**

**(A) In general**

The Director shall establish an Advisory Committee on Earthquake Hazards Reduction of at least 11 members, none of whom may be an employee (as defined in subparagraphs (A) through (F) of section 7342(a)(1) of title 5<sup>2</sup> including representatives of research and academic institutions, industry standards development organizations, State and local government, and financial communities who are qualified to provide advice on earthquake hazards reduction and represent all related scientific, architectural, and engineering disciplines. The recommendations of the Advisory Committee shall be considered by Federal agencies in implementing the Program.

**(B) Assessment**

The Advisory Committee shall assess—

- (i) trends and developments in the science and engineering of earthquake hazards reduction;
- (ii) effectiveness of the Program in carrying out the activities under (a)(2)<sup>3</sup> of this section;
- (iii) the need to revise the Program; and
- (iv) the management, coordination, implementation, and activities of the Program.

**(C) Report**

Not later than 1 year after October 25, 2004, and at least once every 2 years thereafter, the Advisory Committee shall report to the Director on its findings of the assessment carried out under subparagraph (B) and its recommendations for ways to improve the Program. In developing recommendations, the Committee shall consider the recommendations of the United States Geological Survey Scientific Earthquake Studies Advisory Committee.

<sup>1</sup>So in original. Probably should be preceded by “subparagraph”.

<sup>2</sup>So in original. Probably should be followed by a closing parenthesis.

<sup>3</sup>So in original. Probably should be preceded by “subsection”.

**(D) Federal Advisory Committee Act application**

Section 14 of the Federal Advisory Committee Act (5 App. U.S.C. 14) shall not apply to the Advisory Committee.

**(b) Responsibilities of Program agencies**

**(1) Lead agency**

The National Institute of Standards and Technology shall have the primary responsibility for planning and coordinating the Program. In carrying out this paragraph, the Director of the Institute shall—

(A) ensure that the Program includes the necessary steps to promote the implementation of earthquake hazard reduction measures by Federal, State, and local governments, national standards and model building code organizations, architects and engineers, and others with a role in planning and constructing buildings and lifelines;

(B) support the development of performance-based seismic engineering tools, and work with appropriate groups to promote the commercial application of such tools, through earthquake-related building codes, standards, and construction practices;

(C) request the assistance of Federal agencies other than the Program agencies, as necessary to assist in carrying out this chapter; and

(D) work with the Federal Emergency Management Agency, the National Science Foundation, and the United States Geological Survey, to develop a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (existing at the time of the development of the plan), upgrade facilities and equipment as needed, and integrate new, innovative testing approaches to the research infrastructure in a systematic manner.

**(2) Department of Homeland Security; Federal Emergency Management Agency**

**(A) Program responsibilities**

The Under Secretary of Homeland Security for Emergency Preparedness and Response (the Administrator of the Federal Emergency Management Agency)—

(i) shall work closely with national standards and model building code organizations, in conjunction with the National Institute of Standards and Technology, to promote the implementation of research results;

(ii) shall promote better building practices within the building design and construction industry including architects, engineers, contractors, builders, and inspectors;

(iii) shall operate a program of grants and assistance to enable States to develop mitigation, preparedness, and response plans, prepare inventories and conduct seismic safety inspections of critical structures and lifelines, update building and zoning codes and ordinances to enhance seismic safety, increase earthquake awareness and education, and encourage the development of multi-State groups for such purposes;

(iv) shall support the implementation of a comprehensive earthquake education and public awareness program, including development of materials and their wide dissemination to all appropriate audiences and support public access to locality-specific information that may assist the public in preparing for, mitigating against, responding to and recovering from earthquakes and related disasters;

(v) shall assist the National Institute of Standards and Technology, other Federal agencies, and private sector groups, in the preparation, maintenance, and wide dissemination of seismic resistant design guidance and related information on building codes, standards, and practices for new and existing buildings, structures, and lifelines, and aid in the development of performance-based design guidelines and methodologies supporting model codes for buildings, structures, and lifelines that are cost effective and affordable;

(vi) shall develop, coordinate, and execute the National Response Plan when required following an earthquake, and support the development of specific State and local plans for each high risk area to ensure the availability of adequate emergency medical resources, search and rescue personnel and equipment, and emergency broadcast capability;

(vii) shall develop approaches to combine measures for earthquake hazards reduction with measures for reduction of other natural and technological hazards including performance-based design approaches;

(viii) shall provide preparedness, response, and mitigation recommendations to communities after an earthquake prediction has been made under paragraph (3)(D); and

(ix) may enter into cooperative agreements or contracts with States and local jurisdictions and other Federal agencies to establish demonstration projects on earthquake hazard mitigation, to link earthquake research and mitigation efforts with emergency management programs, or to prepare educational materials for national distribution.

**(B) State assistance program criteria**

In order to qualify for assistance under subparagraph (A)(i), a State must—

(i) demonstrate that the assistance will result in enhanced seismic safety in the State;

(ii) provide a share of the costs of the activities for which assistance is being given, in accordance with subparagraph (C); and

(iii) meet such other requirements as the Administrator of the Agency shall prescribe.

**(C) Non-Federal cost sharing**

(i) In the case of any State which has received, before October 1, 1990, a grant from the Agency for activities under this chapter which included a requirement for cost sharing by matching such grant, any grant obtained from the Agency for activities under

subparagraph (A)(i) after such date shall not include a requirement for cost sharing in an amount greater than 50 percent of the cost of the project for which the grant is made.

(ii) In the case of any State which has not received, before October 1, 1990, a grant from the Agency for activities under this chapter which included a requirement for cost sharing by matching such grant, any grant obtained from the Agency for activities under subparagraph (A)(i) after such date—

(I) shall not include a requirement for cost sharing for the first fiscal year of such a grant;

(II) shall not include a requirement for cost sharing in an amount greater than 25 percent of the cost of the project for which the grant is made for the second fiscal year of such grant, and any cost sharing requirement may be satisfied through in-kind contributions;

(III) shall not include a requirement for cost sharing in an amount greater than 35 percent of the cost of the project for which the grant is made for the third fiscal year of such grant, and any cost sharing requirement may be satisfied through in-kind contributions; and

(IV) shall not include a requirement for cost sharing in an amount greater than 50 percent of the cost of the project for which the grant is made for the fourth and subsequent fiscal years of such grant.

### (3) United States Geological Survey

The United States Geological Survey shall conduct research and other activities necessary to characterize and identify earthquake hazards, assess earthquake risks, monitor seismic activity, and improve earthquake predictions. In carrying out this paragraph, the Director of the United States Geological Survey shall—

(A) conduct a systematic assessment of the seismic risks in each region of the Nation prone to earthquakes, including, where appropriate, the establishment and operation of intensive monitoring projects on hazardous faults, seismic microzonation studies in urban and other developed areas where earthquake risk is determined to be significant, and engineering seismology studies;

(B) work with officials of State and local governments to ensure that they are knowledgeable about the specific seismic risks in their areas;

(C) develop standard procedures, in consultation with the Administrator of the Federal Emergency Management Agency and the Director of the National Institute of Standards and Technology, for issuing earthquake predictions, including aftershock advisories;

(D) issue when necessary, and notify the Administrator of the Federal Emergency Management Agency and the Director of the National Institute of Standards and Technology of, an earthquake prediction or other earthquake advisory, which may be evaluated by the National Earthquake Prediction

Evaluation Council, which shall be exempt from the requirements of section 10(a)(2) of the Federal Advisory Committee Act when meeting for such purposes;

(E) operate, using the National Earthquake Information Center, a forum for the international exchange of earthquake information which shall—

(i) promote the exchange of information on earthquake research and earthquake preparedness between the United States and other nations;

(ii) maintain a library containing selected reports, research papers, and data produced through the Program;

(iii) answer requests from other nations for information on United States earthquake research and earthquake preparedness programs; and

(iv) direct foreign requests to the agency involved in the Program which is best able to respond to the request;

(F) operate a National Seismic System;

(G) support regional seismic networks, which shall complement the National Seismic Network; and<sup>4</sup>

(H) work with the National Science Foundation, the Federal Emergency Management Agency, and the National Institute of Standards and Technology to develop a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (in existence at the time of the development of the plan), upgrade facilities and equipment as needed, and integrate new, innovative testing approaches to the research infrastructure in a systematic manner.<sup>5</sup>

(I) work with other Program agencies to coordinate Program activities with similar earthquake hazards reduction efforts in other countries, to ensure that the Program benefits from relevant information and advances in those countries; and

(J) maintain suitable seismic hazard maps in support of building codes for structures and lifelines, including additional maps needed for performance-based design approaches.

### (4) National Science Foundation

The National Science Foundation shall be responsible for funding research on earth sciences to improve the understanding of the causes and behavior of earthquakes, on earthquake engineering, and on human response to earthquakes. In carrying out this paragraph, the Director of the National Science Foundation shall—

(A) encourage prompt dissemination of significant findings, sharing of data, samples, physical collections, and other supporting materials, and development of intellectual property so research results can be used by appropriate organizations to mitigate earthquake damage;

(B) in addition to supporting individual investigators, support university research con-

<sup>4</sup> So in original. The word "and" probably should not appear.

<sup>5</sup> So in original. The period probably should be a semicolon.

sortia and centers for research in geosciences and in earthquake engineering;

(C) work closely with the United States Geological Survey to identify geographic regions of national concern that should be the focus of targeted solicitations for earthquake-related research proposals;

(D) support research that improves the safety and performance of buildings, structures, and lifeline systems using large-scale experimental and computational facilities of the George E. Brown Jr. Network for Earthquake Engineering Simulation and other institutions engaged in research and the implementation of the National Earthquake Hazards Reduction Program;

(E) emphasize, in earthquake engineering research, development of economically feasible methods to retrofit existing buildings and to protect lifelines to mitigate earthquake damage;

(F) support research that studies the political, economic, and social factors that influence the implementation of hazard reduction measures;

(G) include to the maximum extent practicable diverse institutions, including Historically Black Colleges and Universities and those serving large proportions of Hispanics, Native Americans, Asian-Pacific Americans, and other underrepresented populations; and

(H) develop, in conjunction with the Federal Emergency Management Agency, the National Institute of Standards and Technology, and the United States Geological Survey, a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (in existence at the time of the development of the plan), upgrade facilities and equipment as needed, and integrate new, innovative testing approaches to the research infrastructure in a systematic manner.

#### **(5) National Institute of Standards and Technology**

In addition to the lead agency responsibilities described under paragraph (1), the National Institute of Standards and Technology shall be responsible for carrying out research and development to improve building codes and standards and practices for structures and lifelines. In carrying out this paragraph, the Director of the National Institute of Standards and Technology shall—

(A) work closely with national standards and model building code organizations, in conjunction with the Agency, to promote the implementation of research results;

(B) promote better building practices among architects and engineers;

(C) work closely with national standards organizations to develop seismic safety standards and practices for new and existing lifelines;

(D) support the development and commercial application of cost effective and affordable performance-based seismic engineering by providing technical support for seismic engineering practices and related building

code, standards, and practices development; and

(E) work with the National Science Foundation, the Federal Emergency Management Agency, and the United States Geological Survey to develop a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (in existence at the time of the development of the plan), upgrade facilities and equipment as needed, and integrate new, innovative testing approaches to the research infrastructure in a systematic manner.

#### **(c) Budget coordination**

##### **(1) Guidance**

The Interagency Coordinating Committee shall each year provide guidance to the other Program agencies concerning the preparation of requests for appropriations for activities related to the Program, and shall prepare, in conjunction with the other Program agencies, an annual Program budget to be submitted to the Office of Management and Budget.

##### **(2) Reports**

Each Program agency shall include with its annual request for appropriations submitted to the Office of Management and Budget a report that—

(A) identifies each element of the proposed Program activities of the agency;

(B) specifies how each of these activities contributes to the Program; and

(C) states the portion of its request for appropriations allocated to each element of the Program.

(Pub. L. 95-124, § 5, Oct. 7, 1977, 91 Stat. 1099; Pub. L. 96-472, title I, § 101, Oct. 19, 1980, 94 Stat. 2257; Pub. L. 99-105, §§ 5, 6, Sept. 30, 1985, 99 Stat. 475; Pub. L. 100-252, § 2, Feb. 29, 1988, 102 Stat. 18; Pub. L. 100-418, title V, § 5115(c), Aug. 23, 1988, 102 Stat. 1433; Pub. L. 100-707, title I, § 109(u), Nov. 23, 1988, 102 Stat. 4710; Pub. L. 101-614, § 5, Nov. 16, 1990, 104 Stat. 3232; Pub. L. 105-47, § 3, Oct. 1, 1997, 111 Stat. 1162; Pub. L. 106-503, title II, § 206, Nov. 13, 2000, 114 Stat. 2307; Pub. L. 108-360, title I, § 103, Oct. 25, 2004, 118 Stat. 1669; Pub. L. 109-295, title VI, § 612(c), Oct. 4, 2006, 120 Stat. 1410.)

#### **REFERENCES IN TEXT**

Sections 14 and 10(a)(2) of the Federal Advisory Committee Act, referred to in subsecs. (a)(5)(D) and (b)(3)(D), are sections 14 and 10(a)(2) of Pub. L. 92-463, which are set out in the Appendix to Title 5, Government Organization and Employees.

#### **AMENDMENTS**

2004—Subsec. (a). Pub. L. 108-360, § 103(1), amended heading and text of subsec. (a) generally. Prior to amendment, text read as follows: “There is established a National Earthquake Hazards Reduction Program.”

Subsec. (b)(1). Pub. L. 108-360, § 103(2)(A)(i), (iv), in introductory provisions, substituted “National Institute of Standards and Technology shall have the primary responsibility for planning and coordinating the Program. In carrying out this paragraph, the Director of the Institute” for “Federal Emergency Management Agency (hereafter in this chapter referred to as the ‘Agency’) shall have the primary responsibility for planning and coordinating the Program. In carrying

out this paragraph, the Director of the Agency” and struck out concluding provisions which read as follows: “The principal official carrying out the responsibilities described in this paragraph shall be at a level no lower than that of Associate Director.”

Subsec. (b)(1)(B). Pub. L. 108-360, §103(2)(A)(ii), (iii), added subpar. (B) and struck out former subpar. (B) which read as follows: “prepare, in conjunction with the other Program agencies, a written plan for the Program, which shall include specific tasks and milestones for each Program agency, and which shall be submitted to the Congress and updated at such times as may be required by significant Program events, but in no event less frequently than every 3 years;”.

Subsec. (b)(1)(C). Pub. L. 108-360, §103(2)(A)(ii), redesignated subpar. (D) as (C) and struck out former subpar. (C) which read as follows: “prepare, in conjunction with the other Program agencies, a biennial report, to be submitted to the Congress within 90 days after the end of each even-numbered fiscal year, which shall describe the activities and achievements of the Program during the preceding two fiscal years;”.

Subsec. (b)(1)(D), (E). Pub. L. 108-360, §103(2)(A)(ii), (v), redesignated subpar. (E) as (D) and substituted “Federal Emergency Management Agency, the National Science Foundation” for “National Science Foundation, the National Institute of Standards and Technology”. Former subpar. (D) redesignated (C).

Subsec. (b)(2). Pub. L. 108-360, §103(2)(B), inserted heading, struck out former heading “Federal Emergency Management Agency”, added subpar. (A), and struck out heading and text of former subpar. (A) which related to earthquake program responsibilities of the Director of the Federal Emergency Management Agency.

Subsec. (b)(3). Pub. L. 108-360, §103(2)(C)(i), inserted “and other activities” after “shall conduct research” in introductory provisions.

Subsec. (b)(3)(C). Pub. L. 108-360, §103(2)(C)(ii), substituted “the Director of the Federal Emergency Management Agency and the Director of the National Institute of Standards and Technology” for “the Agency”.

Subsec. (b)(3)(D). Pub. L. 108-360, §103(2)(C)(iii), substituted “the Director of the Federal Emergency Management Agency and the Director of the National Institute of Standards and Technology” for “the Director of the Agency”.

Subsec. (b)(3)(E). Pub. L. 108-360, §103(2)(C)(iv), substituted “operate, using the National Earthquake Information Center, a forum for the international exchange of earthquake information” for “establish, using existing facilities, a Center for the International Exchange of Earthquake Information” in introductory provisions.

Subsec. (b)(3)(F). Pub. L. 108-360, §103(2)(C)(v), substituted “System” for “Network”.

Subsec. (b)(3)(I), (J). Pub. L. 108-360, §103(2)(C)(vi), added subpars. (I) and (J).

Subsec. (b)(4)(D) to (H). Pub. L. 108-360, §103(2)(D), added subpars. (D) and (G) and redesignated former subpars. (D), (E), and (F) as (E), (F), and (H), respectively.

Subsec. (b)(5). Pub. L. 108-360, §103(2)(E), in introductory provisions, substituted “In addition to the lead agency responsibilities described under paragraph (1), the National” for “The National”.

Subsec. (b)(5)(D), (E). Pub. L. 108-360, §103(2)(F), added subpar. (D) and redesignated former subpar. (D) as (E).

Subsec. (c)(1). Pub. L. 108-360, §103(3), substituted “Interagency Coordinating Committee” for “Agency”.

2000—Subsec. (b)(1). Pub. L. 106-503, §206(1), redesignated subpars. (B) to (F) as (A) to (E), respectively, and struck out former subpar. (A) which read as follows: “prepare, in conjunction with the other Program agencies, an annual budget for the Program to be submitted to the Office of Management and Budget;”.

Subsec. (b)(2)(A)(ii). Pub. L. 106-503, §208, inserted before semicolon at end “, and development of means of increasing public access to available locality-specific information that may assist the public in preparing for or responding to earthquakes”.

Subsec. (c). Pub. L. 106-503, §206(2), added subsec. (c). 1997—Subsec. (b)(1)(F). Pub. L. 105-47, §3(b), added subpar. (F).

Subsec. (b)(3)(H). Pub. L. 105-47, §3(c), added subpar. (H).

Subsec. (b)(4)(F). Pub. L. 105-47, §3(a), added subpar. (F).

Subsec. (b)(5)(D). Pub. L. 105-47, §3(d), added subpar. (D).

1990—Pub. L. 101-614 amended section generally, substituting present provisions consisting of subsecs. (a) and (b) for former provisions which provided for: in subsec. (a), establishment of program; in subsec. (b), duties of President and Director of Federal Emergency Management Agency; in subsec. (c), objectives of program; in subsec. (d), Federal participation; in subsec. (e), research elements; in subsec. (f), mitigation elements; in subsec. (g), State assistance; in subsec. (h), non-Federal participation; in subsec. (i), study and recommendations on disaster relief; and in subsec. (j), cost sharing.

1988—Subsec. (b)(2)(F). Pub. L. 100-418 substituted “National Institute of Standards and Technology” for “National Bureau of Standards”.

Subsecs. (g), (i). Pub. L. 100-707 substituted “Disaster Relief and Emergency Assistance Act” for “Disaster Relief Act of 1974”.

Subsec. (j). Pub. L. 100-252 added subsec. (j).

1985—Subsec. (b)(2)(E). Pub. L. 99-105, §5, amended subpar. (E) generally, substituting “to be submitted to the Congress and updated at such times as may be required by significant program events, but in no event less frequently than every three years;” for “which plan will recommend base and incremental budget options for the agencies to carry out the elements and programs specified through at least 1985, and which plan shall be completed by September 30, 1981, and transmitted to the Congress and shall be updated annually; and”.

Subsec. (b)(2)(F), (G). Pub. L. 99-105, §6, added subpar. (F) and redesignated former subpar. (F) as (G).

1980—Subsec. (a). Pub. L. 96-472, §101(a), inserted provisions relating to non-Federal participation in par. (2), and substituted provisions respecting the elements described in subsec. (f) of this section, for provisions respecting the implementation plan described in subsec. (f) of this section in par. (3).

Subsec. (b). Pub. L. 96-472, §101(b), substituted provisions setting forth the duties of the President and the Director of the Federal Emergency Management Agency with respect to the Program for provisions setting forth the duties of the President with respect to the program and plan.

Subsec. (d). Pub. L. 96-472, §101(c), substituted “(1)(A)” for “(3)(B)”, “Department of Commerce” for “National Bureau of Standards”, and “Federal Emergency Management Agency” for “National Fire Prevention and Control Administration”.

Subsec. (e)(6). Pub. L. 96-472, §101(d), substituted “potential” for “political”.

Subsec. (f). Pub. L. 96-472, §101(e), substituted in provision preceding par. (1), provision directing that the mitigation elements of the program are to be as specified in pars. (1) to (8) for provision authorizing the establishment of a implementation plan, year-by-year targets, and Federal and non-Federal roles, in par. (1), substituted provision including as one of the mitigating elements, issuance of earthquake predictions for provision including in the implementation plan development of measures in preparing for earthquakes, actual predictions, warnings, and insuring a comprehensive response to an earthquake, added pars. (7) and (8), and struck out provision following par. (8), that when the implementation plan developed by the President contemplates specific action to be taken by a Federal agency, department, or entity, and at the end of the 30-day period beginning on the date the President submits such plan to the appropriate authorizing committees of Congress and such action has not been initiated, the President submit to such committees a report why such action has not been taken.



Subsec. (i). Pub. L. 96-472, §101(f), added subsec. (i).

#### CHANGE OF NAME

“Administrator of the Federal Emergency Management Agency” and “Administrator of the Agency” substituted for “Director of the Federal Emergency Management Agency” and “Director of the Agency”, respectively, in subsec. (b)(2)(A), (B)(iii), (3)(C), (D) on authority of section 612(c) of Pub. L. 109-295, set out as a note under section 313 of Title 6, Domestic Security. Any reference to the Administrator of the Federal Emergency Management Agency in title VI of Pub. L. 109-295 or an amendment by title VI to be considered to refer and apply to the Director of the Federal Emergency Management Agency until Mar. 31, 2007, see section 612(f)(2) of Pub. L. 109-295, set out as a note under section 313 of Title 6.

#### TRANSFER OF FUNCTIONS

For transfer of all functions, personnel, assets, components, authorities, grant programs, and liabilities of the Federal Emergency Management Agency, including the functions of the Under Secretary for Federal Emergency Management relating thereto, to the Federal Emergency Management Agency, see section 315(a)(1) of Title 6, Domestic Security.

For transfer of functions, personnel, assets, and liabilities of the Federal Emergency Management Agency, including the functions of the Director of the Federal Emergency Management Agency relating thereto, to the Secretary of Homeland Security, and for treatment of related references, see former section 313(1) and sections 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

#### REAL-TIME PUBLIC AVAILABILITY OF RAW SEISMOLOGICAL DATA

Pub. L. 107-228, div. B, title XVI, §1602, Sept. 30, 2002, 116 Stat. 1460, provided that: “The head of the Air Force Technical Applications Center shall make available to the public, immediately upon receipt or as soon after receipt as is practicable, all raw seismological data provided to the United States Government by any international monitoring organization that is directly responsible for seismological monitoring.”

Pub. L. 106-113, div. B, §1000(a)(7) [div. B, title XI, §1116], Nov. 29, 1999, 113 Stat. 1536, 1501A-489, provided that: “The United States Government shall, to the maximum extent practicable, make available to the public in real time, or as quickly as possible, all raw seismological data provided to the United States Government by any international organization that is directly responsible for seismological monitoring.”

#### AUTHORIZATION OF REAL-TIME SEISMIC HAZARD WARNING SYSTEM DEVELOPMENT, AND OTHER ACTIVITIES

Section 2 of Pub. L. 105-47, as amended by Pub. L. 106-503, title II, §202(c), Nov. 13, 2000, 114 Stat. 2305; Pub. L. 107-110, title X, §1076(cc), Jan. 8, 2002, 115 Stat. 2093, provided that:

“(a) AUTOMATIC SEISMIC WARNING SYSTEM DEVELOPMENT.—

“(1) DEFINITIONS.—In this section:

“(A) DIRECTOR.—The term ‘Director’ means the Director of the United States Geological Survey.

“(B) HIGH-RISK ACTIVITY.—The term ‘high-risk activity’ means an activity that may be adversely affected by a moderate to severe seismic event (as determined by the Director). The term includes high-speed rail transportation.

“(C) REAL-TIME SEISMIC WARNING SYSTEM.—The term ‘real-time seismic warning system’ means a system that issues warnings in real-time from a network of seismic sensors to a set of analysis processors, directly to receivers related to high-risk activities.

“(2) IN GENERAL.—The Director shall conduct a program to develop a prototype real-time seismic warn-

ing system. The Director may enter into such agreements or contracts as may be necessary to carry out the program.

“(3) UPGRADE OF SEISMIC SENSORS.—In carrying out a program under paragraph (2), in order to increase the accuracy and speed of seismic event analysis to provide for timely warning signals, the Director shall provide for the upgrading of the network of seismic sensors participating in the prototype to increase the capability of the sensors—

“(A) to measure accurately large magnitude seismic events (as determined by the Director); and

“(B) to acquire additional parametric data.

“(4) DEVELOPMENT OF COMMUNICATIONS AND COMPUTATION INFRASTRUCTURE.—In carrying out a program under paragraph (2), the Director shall develop a communications and computation infrastructure that is necessary—

“(A) to process the data obtained from the upgraded seismic sensor network referred to in paragraph (3); and

“(B) to provide for, and carry out, such communications engineering and development as is necessary to facilitate—

“(i) the timely flow of data within a real-time seismic hazard warning system; and

“(ii) the issuance of warnings to receivers related to high-risk activities.

“(5) PROCUREMENT OF COMPUTER HARDWARE AND COMPUTER SOFTWARE.—In carrying out a program under paragraph (2), the Director shall procure such computer hardware and computer software as may be necessary to carry out the program.

“(6) REPORTS ON PROGRESS.—

“(A) IN GENERAL.—Not later than 120 days after the date of enactment of this Act [Oct. 1, 1997], the Director shall prepare and submit to Congress a report that contains a plan for implementing a real-time seismic hazard warning system.

“(B) ADDITIONAL REPORTS.—Not later than 1 year after the date on which the Director submits the report under subparagraph (A), and annually thereafter, the Director shall prepare and submit to Congress a report that summarizes the progress of the Director in implementing the plan referred to in subparagraph (A).

“(7) AUTHORIZATION OF APPROPRIATIONS.—In addition to the amounts made available to the Director under section 12(b) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7706(b)), there are authorized to be appropriated to the Department of the Interior, to be used by the Director to carry out paragraph (2), \$3,000,000 for each of fiscal years 1998 and 1999; \$2,600,000 for fiscal year 2001; \$2,710,000 for fiscal year 2002; and \$2,825,000 for fiscal year 2003.

“(b) SEISMIC MONITORING NETWORKS ASSESSMENT.—

“(1) IN GENERAL.—The Director shall provide for an assessment of regional seismic monitoring networks in the United States. The assessment shall address—

“(A) the need to update the infrastructure used for collecting seismological data for research and monitoring of seismic events in the United States;

“(B) the need for expanding the capability to record strong ground motions, especially for urban area engineering purposes;

“(C) the need to measure accurately large magnitude seismic events (as determined by the Director);

“(D) the need to acquire additional parametric data; and

“(E) projected costs for meeting the needs described in subparagraphs (A) through (D).

“(2) RESULTS.—The Director shall transmit the results of the assessment conducted under this subsection to Congress not later than 1 year after the date of enactment of this Act [Oct. 1, 1997].

“(c) EARTH SCIENCE TEACHING MATERIALS.—

“(1) DEFINITIONS.—In this subsection:

“(A) LOCAL EDUCATIONAL AGENCY.—The term ‘local educational agency’ has the meaning given

that term in section 9101 of the Elementary and Secondary Education Act of 1965 [20 U.S.C. 7801].

“(B) SCHOOL.—The term ‘school’ means a non-profit institutional day or residential school that provides education for any of the grades kindergarten through grade 12.

“(2) TEACHING MATERIALS.—In a manner consistent with the requirement under section 5(b)(4) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7704(b)(4)) and subject to a merit based competitive process, the Director of the National Science Foundation may use funds made available to him or her under section 12(c) of such Act (42 U.S.C. 7706(c)) to develop, and make available to schools and local educational agencies for use by schools, at a minimal cost, earth science teaching materials that are designed to meet the needs of elementary and secondary school teachers and students.

“(d) IMPROVED SEISMIC HAZARD ASSESSMENT.—

“(1) IN GENERAL.—As soon as practicable after the date of enactment of this Act [Oct. 1, 1997], the Director shall conduct a project to improve the seismic hazard assessment of seismic zones.

“(2) REPORTS.—

“(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, and annually during the period of the project, the Director shall prepare, and submit to Congress, a report on the findings of the project.

“(B) FINAL REPORT.—Not later than 60 days after the date of termination of the project conducted under this subsection, the Director shall prepare and submit to Congress a report concerning the findings of the project.

“(e) STUDY OF NATIONAL EARTHQUAKE EMERGENCY TRAINING CAPABILITIES.—

“(1) IN GENERAL.—The Director of the Federal Emergency Management Agency shall conduct an assessment of the need for additional Federal disaster-response training capabilities that are applicable to earthquake response.

“(2) CONTENTS OF ASSESSMENT.—The assessment conducted under this subsection shall include—

“(A) a review of the disaster training programs offered by the Federal Emergency Management Agency at the time of the assessment;

“(B) an estimate of the number and types of emergency response personnel that have, during the period beginning on January 1, 1990 and ending on July 1, 1997, sought the training referred to in subparagraph (A), but have been unable to receive that training as a result of the oversubscription of the training capabilities of the Federal Emergency Management Agency; and

“(C) a recommendation on the need to provide additional Federal disaster-response training centers.

“(3) REPORT.—Not later than 180 days after the date of enactment of this Act [Oct. 1, 1997], the Director shall prepare and submit to Congress a report that addresses the results of the assessment conducted under this subsection.”

#### STUDIES ON ECONOMIC IMPACT OF CATASTROPHIC EARTHQUAKES AND IMPROVING EARTHQUAKE MITIGATION

Section 14 of Pub. L. 101-614 directed Director of Federal Emergency Management Agency to submit two reports to Congress within 12 months after Nov. 16, 1990, one report outlining results of a study on impact and repercussions of a catastrophic earthquake on local, regional, and national economies, and the other report outlining results of a study on adequacy of preparation and response capabilities for reducing and recovering from losses caused by a catastrophic earthquake.

#### EARTHQUAKE ENGINEERING RESEARCH

Pub. L. 100-570, title I, §115, Oct. 31, 1988, 102 Stat. 2871, directed National Academy of Sciences to conduct a study of earthquake engineering activities being carried out by the Foundation and other Federal agencies

under the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 et seq.), such study to include (1) an assessment of adequacy of each agency's current Federal earthquake engineering efforts, including those designed to increase the implementation of new techniques; the need for specialized research facilities, including large-scale facilities; the division of responsibilities among the various Federal agencies; and recommended levels of funding that the Foundation and other agencies should provide, in the form of grants to individuals, groups, and centers, to non-Federal researchers principally engaged in earthquake engineering research; and (2) recommendations, if any, of the National Academy of Sciences for improvements in the current Federal efforts in the area of earthquake engineering research, with results of the study to be reported to Congress on or before expiration of 12-month period following Oct. 31, 1988.

#### EX. ORD. NO. 12699. SEISMIC SAFETY OF FEDERAL AND FEDERALLY ASSISTED OR REGULATED NEW BUILDING CONSTRUCTION

Ex. Ord. No. 12699, Jan. 5, 1990, 55 F.R. 835, as amended by Ex. Ord. No. 13286, §40, Feb. 28, 2003, 68 F.R. 10626, provided:

By the authority vested in me as President by the Constitution and laws of the United States of America, and in furtherance of the Earthquake Hazards Reduction Act of 1977, as amended (42 U.S.C. 7701 et seq.), which requires that Federal preparedness and mitigation activities are to include “development and promulgation of specifications, building standards, design criteria, and construction practices to achieve appropriate earthquake resistance for new . . . structures,” and “an examination of alternative provisions and requirements for reducing earthquake hazards through Federal and federally financed construction, loans, loan guarantees, and licenses. . . .” (42 U.S.C. 7704(f)(3, 4)), it is hereby ordered as follows:

#### SECTION 1. Requirements for Earthquake Safety of New Federal Buildings.

The purposes of these requirements are to reduce risks to the lives of occupants of buildings owned by the Federal Government and to persons who would be affected by the failures of Federal buildings in earthquakes, to improve the capability of essential Federal buildings to function during or after an earthquake, and to reduce earthquake losses of public buildings, all in a cost-effective manner. A building means any structure, fully or partially enclosed, used or intended for sheltering persons or property.

Each Federal agency responsible for the design and construction of each new Federal building shall ensure that the building is designed and constructed in accord with appropriate seismic design and construction standards. This requirement pertains to all building projects for which development of detailed plans and specifications is initiated subsequent to the issuance of the order. Seismic design and construction standards shall be adopted for agency use in accord with sections 3(a) and 4(a) of this order.

#### SEC. 2. Federally Leased, Assisted, or Regulated Buildings.

The purposes of these requirements are to reduce risks to the lives of occupants of buildings leased for Federal uses or purchased or constructed with Federal assistance, to reduce risks to the lives of persons who would be affected by earthquake failures of federally assisted or regulated buildings, and to protect public investments, all in a cost-effective manner. The provisions of this order shall apply to all the new construction activities specified in the subsections below.

(a) Space Leased for Federal Occupancy. Each Federal agency responsible for the construction and lease of a new building for Federal use shall ensure that the building is designed and constructed in accord with appropriate seismic design and construction standards. This requirement pertains to all leased building projects for which the agreement covering development of detailed plans and specifications is effected subse-

quent to the issuance of this order. Local building codes shall be used in design and construction by those concerned with such activities in accord with section 3(a) and 3(c) of this order and augmented when necessary to achieve appropriate seismic design and construction standards.

(b) Federal Domestic Assistance Programs. Each Federal agency assisting in the financing, through Federal grants or loans, or guaranteeing the financing, through loan or mortgage insurance programs, of newly constructed buildings shall plan, and shall initiate no later than 3 years subsequent to the issuance of this order, measures consistent with section 3(a) of this order, to assure appropriate consideration of seismic safety.

(c) Federally Regulated Buildings. Each Federal agency with generic responsibility for regulating the structural safety of buildings shall plan to require use of appropriate seismic design and construction standards for new buildings within the agency's purview. Implementation of the plan shall be initiated no later than 3 years subsequent to the issuance of this order.

SEC. 3. Concurrent Requirements. (a) In accord with Office of Management and Budget Circular A-119 of January 17, 1980, entitled "Federal Participation in the Development and Use of Voluntary Standards," nationally recognized private sector standards and practices shall be used for the purposes identified in sections 1 and 2 above unless the responsible agency finds that none is available that meets its requirements. The actions ordered herein shall consider the seismic hazards in various areas of the country to be as shown in the most recent edition of the American National Standards Institute Standards A58, *Minimum Design Loads for Buildings and Other Structures*, or subsequent maps adopted for Federal use in accord with this order. Local building codes determined by the responsible agency or by the Interagency Committee for Seismic Safety in Construction to provide adequately for seismic safety, or special seismic standards and practices required by unique agency mission needs, may be used.

(b) All orders, regulations, circulars, or other directives issued, and all other actions taken prior to the date of this order that meet the requirements of this order, are hereby confirmed and ratified and shall be deemed to have been issued under this order.

(c) Federal agencies that are as of this date requiring seismic safety levels that are higher than those imposed by this order in their assigned new building construction programs shall continue to maintain in force such levels.

(d) Nothing in this order shall apply to assistance provided for emergency work essential to save lives and protect property and public health and safety, performed pursuant to Sections 402, 403, 502, and 503 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) (42 U.S.C. 5170a, 5170b, 5192, and 5193), or for temporary housing assistance programs and individual and family grants performed pursuant to Sections 408 and 411 of the Stafford Act (42 U.S.C. 5174 and former 5178). However, this order shall apply to other provisions of the Stafford Act [42 U.S.C. 5121 et seq.] after a presidentially declared major disaster or emergency when assistance actions involve new construction or total replacement of a building. Grantees and subgrantees shall be encouraged to adopt the standards established in section 3(a) of this order for use when the construction does not involve Federal funding as well as when Department of Homeland Security funding applies.

SEC. 4. Agency Responsibilities. (a) The Secretary of Homeland Security shall be responsible for reporting to the President on the execution of this order and providing support for the secretariat of the Interagency Committee on Seismic Safety in Construction (ICSSC). The ICSSC, using consensus procedures, shall be responsible to FEMA for the recommendation for adoption of cost-effective seismic design and construction standards and practices required by sections 1 and 2 of this order. Participation in ICSSC shall be open to all agencies with programs affected by this order.

(b) To the extent permitted by law, each agency shall issue or amend existing regulations or procedures to comply with this order within 3 years of its issuance and plan for their implementation through the usual budget process. Thereafter, each agency shall review, within a period not to exceed 3 years, its regulations or procedures to assess the need to incorporate new or revised standards and practices.

SEC. 5. Reporting. The Department of Homeland Security shall request, from each agency affected by this order, information on the status of its procedures, progress in its implementation plan, and the impact of this order on its operations. The Department of Homeland Security shall include an assessment of the execution of this order in its annual report to the Congress on the National Earthquake Hazards Reduction Program.

SEC. 6. Judicial Review. Nothing in this order is intended to create any right or benefit, substantive or procedural, enforceable at law by a party against the United States, its agencies, its officers, or any person.

## § 7704a. Report on seismic safety property standards

### (a) Authority

The Secretary of Housing and Urban Development (in this section referred to as the "Secretary") shall assess the risk of earthquake-related damage to properties assisted under programs administered by the Secretary and shall develop seismic safety standards for such properties. This section may not be construed to prohibit the Secretary from deferring to local building codes that meet the requirements of the seismic safety standards developed under this section.

### (b) Standards

The standards shall be designed to reduce the risk of loss of life to building occupants to the maximum extent feasible and to reduce the risk of shake-related property damage to the maximum extent practicable.

### (c) Consultation

In carrying out this section, the Secretary shall consult with the Administrator of the Federal Emergency Management Agency and may utilize the resources under the National Earthquake Hazards Reduction Program (established under the Earthquake Hazards Reduction Act of 1977 [42 U.S.C. 7701 et seq.]) and any other resources as may be required to carry out the activities under this section.

(Pub. L. 101-625, title IX, §947, Nov. 28, 1990, 104 Stat. 4416; Pub. L. 109-295, title VI, §612(c), Oct. 4, 2006, 120 Stat. 1410.)

### REFERENCES IN TEXT

The Earthquake Hazards Reduction Act of 1977, referred to in subsec. (c), is Pub. L. 95-124, Oct. 7, 1977, 91 Stat. 1098, as amended, which is classified generally to this chapter (§7701 et seq.). For complete classification of this Act to the Code, see Short Title note set out under section 7701 of this title and Tables.

### CODIFICATION

Subsec. (d) of this section, which required the Secretary to submit a report to Congress not less than biennially on the findings of the risk assessment study conducted under this section and the activities undertaken, and the expenditures made, by the Secretary to carry out this section and Executive Order No. 12699, terminated, effective May 15, 2000, pursuant to section

3003 of Pub. L. 104-66, as amended, set out as a note under section 1113 of Title 31, Money and Finance. See, also, the 4th item on page 104 of House Document No. 103-7.

Section was enacted as part of the Cranston-Gonzalez National Affordable Housing Act, and not as part of the Earthquake Hazards Reduction Act of 1977 which comprises this chapter.

#### CHANGE OF NAME

“Administrator of the Federal Emergency Management Agency” substituted for “Director of the Federal Emergency Management Agency” in subsec. (c) on authority of section 612(c) of Pub. L. 109-295, set out as a note under section 313 of Title 6, Domestic Security. Any reference to the Administrator of the Federal Emergency Management Agency in title VI of Pub. L. 109-295 or an amendment by title VI to be considered to refer and apply to the Director of the Federal Emergency Management Agency until Mar. 31, 2007, see section 612(f)(2) of Pub. L. 109-295, set out as a note under section 313 of Title 6.

#### TRANSFER OF FUNCTIONS

For transfer of all functions, personnel, assets, components, authorities, grant programs, and liabilities of the Federal Emergency Management Agency, including the functions of the Under Secretary for Federal Emergency Management relating thereto, to the Federal Emergency Management Agency, see section 315(a)(1) of Title 6, Domestic Security.

For transfer of functions, personnel, assets, and liabilities of the Federal Emergency Management Agency, including the functions of the Director of the Federal Emergency Management Agency relating thereto, to the Secretary of Homeland Security, and for treatment of related references, see former section 313(1) and sections 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

### §§ 7705, 7705a. Repealed. Pub. L. 105-47, § 4, Oct. 1, 1997, 111 Stat. 1164

Section 7705, Pub. L. 95-124, § 6, Oct. 7, 1977, 91 Stat. 1102; Pub. L. 96-472, title I, § 102(a), Oct. 19, 1980, 94 Stat. 2259; Pub. L. 101-614, § 6, Nov. 16, 1990, 104 Stat. 3236, related to Office of Science and Technology Policy report.

Section 7705a, Pub. L. 95-124, § 7, as added Pub. L. 101-614, § 7(2), Nov. 16, 1990, 104 Stat. 3236, related to establishment of a National Earthquake Hazards Reduction Program Advisory Committee.

### § 7705b. Seismic standards

#### (a) Buildings

##### (1) Adoption of standards

The President shall adopt, not later than December 1, 1994, standards for assessing and enhancing the seismic safety of existing buildings constructed for or leased by the Federal Government which were designed and constructed without adequate seismic design and construction standards. Such standards shall be developed by the Interagency Committee on Seismic Safety in Construction, whose chairman is the Director of the National Institute of Standards and Technology or his designee, and which shall work in consultation with appropriate private sector organizations.

##### (2) Report to Congress

The President shall report to the Congress, not later than December 1, 1994, on how the standards adopted under paragraph (1) could be applied with respect to buildings—

(A) for which Federal financial assistance has been obtained through grants, loans, financing guarantees, or loan or mortgage insurance programs; or

(B) the structural safety of which is regulated by a Federal agency.

#### (3) Regulations

The President shall ensure the issuance, before February 1, 1993, by all Federal agencies of final regulations required by section 4(b) of Executive Order numbered 12699, issued January 5, 1990.

#### (b) Lifelines

The Administrator of the Agency, in consultation with the Director of the National Institute of Standards and Technology, shall submit to the Congress, not later than June 30, 1992, a plan, including precise timetables and budget estimates, for developing and adopting, in consultation with appropriate private sector organizations, design and construction standards for lifelines. The plan shall include recommendations of ways Federal regulatory authority could be used to expedite the implementation of such standards.

(Pub. L. 95-124, § 8, as added Pub. L. 101-614, § 8(a), Nov. 16, 1990, 104 Stat. 3237; amended Pub. L. 109-295, title VI, § 612(c), Oct. 4, 2006, 120 Stat. 1410.)

#### REFERENCES IN TEXT

Executive Order numbered 12699, referred to in subsec. (a)(3), is set out as a note under section 7704 of this title.

#### CHANGE OF NAME

“Administrator of the Agency” substituted for “Director of the Agency” in subsec. (b) on authority of section 612(c) of Pub. L. 109-295, set out as a note under section 313 of Title 6, Domestic Security. Any reference to the Administrator of the Federal Emergency Management Agency in title VI of Pub. L. 109-295 or an amendment by title VI to be considered to refer and apply to the Director of the Federal Emergency Management Agency until Mar. 31, 2007, see section 612(f)(2) of Pub. L. 109-295, set out as a note under section 313 of Title 6.

#### TRANSFER OF FUNCTIONS

For transfer of all functions, personnel, assets, components, authorities, grant programs, and liabilities of the Federal Emergency Management Agency, including the functions of the Under Secretary for Federal Emergency Management relating thereto, to the Federal Emergency Management Agency, see section 315(a)(1) of Title 6, Domestic Security.

For transfer of functions, personnel, assets, and liabilities of the Federal Emergency Management Agency, including the functions of the Director of the Federal Emergency Management Agency relating thereto, to the Secretary of Homeland Security, and for treatment of related references, see former section 313(1) and sections 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

#### REPORT ON VULNERABILITY OF BUILDINGS OWNED AND LEASED BY GOVERNMENT

Section 8(b) of Pub. L. 101-614 directed Comptroller General, not later than 18 months after Nov. 16, 1990, to report to Congress on vulnerability of buildings owned and leased by the Federal Government and on efforts of

Federal agencies to improve the seismic resistance of buildings they own or lease, and for each such agency, the Comptroller General to enumerate the number of buildings owned or leased by the agency, the seriousness of the seismic risk to such buildings, and the value of the buildings at risk, as well as tabulate the expenditures each such agency had devoted to reducing earthquake damage and estimate the total expenditure necessary to address the problem adequately.

EX. ORD. NO. 12941. SEISMIC SAFETY OF EXISTING  
FEDERALLY OWNED OR LEASED BUILDINGS

Ex. Ord. No. 12941, Dec. 1, 1994, 59 F.R. 62545, provided: By the authority vested in me as President by the Constitution and the laws of the United States of America, and in furtherance of the Earthquake Hazards Reduction Act of 1977 [42 U.S.C. 7701 et seq.], as amended by Public Law 101-614, which requires the President to adopt “standards for assessing and enhancing the seismic safety of existing buildings constructed for or leased by the Federal Government which were designed and constructed without adequate seismic design and construction standards” (42 U.S.C. 7705b(a)), it is hereby ordered as follows:

SECTION 1. *Adoption of Minimum Standards. The Standards of Seismic Safety for Existing Federally Owned or Leased Buildings* (Standards), developed, issued, and maintained by the Interagency Committee on Seismic Safety in Construction (ICSSC), are hereby adopted as the minimum level acceptable for use by Federal departments and agencies in assessing the seismic safety of their owned and leased buildings and in mitigating unacceptable seismic risks in those buildings. The Standards shall be applied, at a minimum, to those buildings identified in the Standards as requiring evaluation and, if necessary, mitigation. Evaluations and mitigations that were completed prior to the date of this order under agency programs that were based on standards deemed adequate and appropriate by the individual agency need not be reconsidered unless otherwise stipulated by the Standards.

For the purposes of this order, buildings are defined as any structure, fully or partially enclosed, located within the United States as defined in the Earthquake Hazards Reduction Act of 1977, as amended, (42 U.S.C. 7703(5)), used or intended for sheltering persons or property, except for the exclusions specified in the Standards.

SEC. 2. *Estimating Costs of Mitigation.* Each agency that owns or leases buildings for Federal use shall, within 4 years of the issuance of this order, develop an inventory of their owned and leased buildings and shall estimate the costs of mitigating unacceptable seismic risks in those buildings. The cost estimate shall be based on the exemptions and evaluation and mitigation requirements in the Standards. Guidance for the development of the inventory and cost estimates will be issued by the ICSSC no later than 1 year after the signing of this order. Cost estimates with supporting documentation shall be submitted to the Director [now Administrator] of the Federal Emergency Management Agency (FEMA) no later than 4 years after the signing of this order.

SEC. 3. *Implementation Responsibilities.* (a) The Federal Emergency Management Agency is responsible for (1) notifying all Federal departments and agencies of the existence and content of this order; (2) preparing for the Congress, in consultation with the ICSSC, no later than 6 years after the issuance of this order, a comprehensive report on how to achieve an adequate level of seismic safety in federally owned and leased buildings in an economically feasible manner; and (3) preparing for the Congress on a biennial basis, a report on the execution of this order.

(b) The National Institute of Standards and Technology is responsible for providing technical assistance to the Federal departments and agencies in the implementation of this order.

(c) Federal departments and agencies may request an exemption from this order from the Director of the Office of Management and Budget.

SEC. 4. *Updating Programs.* The ICSSC shall update the Standards at least every 5 years. It shall also update the Standards within 2 years of the publication of the first edition of FEMA’s *Guidelines for Seismic Rehabilitation of Buildings and Commentary*.

SEC. 5. *Judicial Review.* Nothing in this order is intended to create any right to administrative or judicial review, or any other right, benefit, or trust responsibility, substantive or procedural, enforceable at law by any party against the United States, its agencies or instrumentalities, its officers or employees, or any person.

WILLIAM J. CLINTON.

§ 7705c. Acceptance of gifts

(a) Authority

In furtherance of the purposes of this chapter, the Administrator of the Agency may accept and use bequests, gifts, or donations of services, money, or property, notwithstanding section 1342 of title 31.

(b) Criteria

The Administrator of the Agency shall establish by regulation criteria for determining whether to accept bequests, gifts, or donations of services, money, or property. Such criteria shall take into consideration whether the acceptance of the bequest, gift, or donation would reflect unfavorably on the Administrator’s ability to carry out his responsibilities in a fair and objective manner, or would compromise the integrity of, or the appearance of the integrity of, the Program or any official involved in administering the Program.

(Pub. L. 95-124, §9, as added Pub. L. 101-614, §9, Nov. 16, 1990, 104 Stat. 3238; amended Pub. L. 109-295, title VI, §612(c), Oct. 4, 2006, 120 Stat. 1410.)

CODIFICATION

In subsec. (a), “section 1342 of title 31” was substituted for “section 3679 of the Revised Statutes (31 U.S.C. 1342)” on authority of Pub. L. 97-258, §4(b), Sept. 13, 1982, 96 Stat. 1067, the first section of which enacted Title 31, Money and Finance.

CHANGE OF NAME

“Administrator of the Agency” and “Administrator’s” substituted for “Director of the Agency” and “Director’s”, respectively, in subssecs. (a) and (b) on authority of section 612(c) of Pub. L. 109-295, set out as a note under section 313 of Title 6, Domestic Security. Any reference to the Administrator of the Federal Emergency Management Agency in title VI of Pub. L. 109-295 or an amendment by title VI to be considered to refer and apply to the Director of the Federal Emergency Management Agency until Mar. 31, 2007, see section 612(f)(2) of Pub. L. 109-295, set out as a note under section 313 of Title 6.

TRANSFER OF FUNCTIONS

For transfer of all functions, personnel, assets, components, authorities, grant programs, and liabilities of the Federal Emergency Management Agency, including the functions of the Under Secretary for Federal Emergency Management relating thereto, to the Federal Emergency Management Agency, see section 315(a)(1) of Title 6, Domestic Security.

For transfer of functions, personnel, assets, and liabilities of the Federal Emergency Management Agency, including the functions of the Director of the Federal Emergency Management Agency relating thereto, to the Secretary of Homeland Security, and for treatment of related references, see former section 313(1) and

sections 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

**§ 7705d. Repealed. Pub. L. 106-503, title II, § 203, Nov. 13, 2000, 114 Stat. 2305**

Section, Pub. L. 95-124, § 10, as added Pub. L. 101-614, § 10, Nov. 16, 1990, 104 Stat. 3238, related to non-Federal cost sharing for supplemental funds.

**§ 7705e. Post-earthquake investigations program**

There is established within the United States Geological Survey a post-earthquake investigations program, the purpose of which is to investigate major earthquakes, so as to learn lessons which can be applied to reduce the loss of lives and property in future earthquakes. The United States Geological Survey, in consultation with each Program agency, shall organize investigations to study the implications of the earthquake in the areas of responsibility of each Program agency. The investigations shall begin as rapidly as possible and may be conducted by grantees and contractors. The Program agencies shall ensure that the results of investigations are disseminated widely. The Director of the Survey is authorized to utilize earthquake expertise from the Agency, the National Science Foundation, the National Institute of Standards and Technology, other Federal agencies, and private contractors, on a reimbursable basis, in the conduct of such earthquake investigations. At a minimum, investigations under this section shall include—

- (1) analysis by the National Science Foundation and the United States Geological Survey of the causes of the earthquake and the nature of the resulting ground motion;
- (2) analysis by the National Science Foundation and the National Institute of Standards and Technology of the behavior of structures and lifelines, both those that were damaged and those that were undamaged; and
- (3) analysis by each of the Program agencies of the effectiveness of the earthquake hazards mitigation programs and actions relating to its area of responsibility under the Program, and how those programs and actions could be strengthened.

(Pub. L. 95-124, § 11, as added Pub. L. 101-614, § 11(a), Nov. 16, 1990, 104 Stat. 3239.)

**TRANSFER OF FUNCTIONS**

For transfer of all functions, personnel, assets, components, authorities, grant programs, and liabilities of the Federal Emergency Management Agency, including the functions of the Under Secretary for Federal Emergency Management relating thereto, to the Federal Emergency Management Agency, see section 315(a)(1) of Title 6, Domestic Security.

For transfer of functions, personnel, assets, and liabilities of the Federal Emergency Management Agency, including the functions of the Director of the Federal Emergency Management Agency relating thereto, to the Secretary of Homeland Security, and for treatment of related references, see former section 313(1) and sections 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

**REPORT ON FUNDING OF PROGRAM**

Section 11(b) of Pub. L. 101-614 directed Director of Federal Emergency Management Agency in consulta-

tion with other agencies of National Earthquake Hazards Reduction Program, not later than one year after Nov. 16, 1990, to report to Congress on possible options for funding a program for post-earthquake investigations, which would, at a minimum, consider funding such a program either by setting aside a percentage of disaster relief funds provided by Federal Emergency Management Agency after a major earthquake or by a revolving fund, and which would also include a recommendation on how the funding for such investigations would be allocated among the other Program agencies.

**§ 7706. Authorization of appropriations**

**(a) General authorization for program**

(1) There are authorized to be appropriated to the President to carry out the provisions of sections 7704 and 7705<sup>1</sup> of this title (in addition to any authorizations for similar purposes included in other Acts and the authorizations set forth in subsections (b) and (c) of this section), not to exceed \$1,000,000 for the fiscal year ending September 30, 1978, not to exceed \$2,000,000 for the fiscal year ending September 30, 1979, and not to exceed \$2,000,000 for the fiscal year ending September 30, 1980.

(2) There are authorized to be appropriated to the Director to carry out the provisions of sections 7704 and 7705<sup>1</sup> of this title for the fiscal year ending September 30, 1981—

(A) \$1,000,000 for continuation of the Interagency Committee on Seismic Safety in Construction and the Building Seismic Safety Council programs,

(B) \$1,500,000 for plans and preparedness for earthquake disasters,

(C) \$500,000 for prediction response planning,

(D) \$600,000 for architectural and engineering planning and practice programs,

(E) \$1,000,000 for development and application of a public education program,

(F) \$3,000,000 for use by the National Science Foundation in addition to the amount authorized to be appropriated under subsection (c) of this section, which amount includes \$2,400,000 for earthquake policy research and \$600,000 for the strong ground motion element of the siting program, and

(G) \$1,000,000 for use by the Center for Building Technology, National Institute of Standards and Technology in addition to the amount authorized to be appropriated under subsection (d) of this section for earthquake activities in the Center.

(3) There are authorized to be appropriated to the Director for the fiscal year ending September 30, 1982, \$2,000,000 to carry out the provisions of sections 7704 and 7705<sup>1</sup> of this title.

(4) There are authorized to be appropriated to the Director, to carry out the provisions of sections 7704 and 7705<sup>1</sup> of this title, \$1,281,000 for the fiscal year ending September 30, 1983.

(5) There are authorized to be appropriated to the Director, to carry out the provisions of sections 7704 and 7705<sup>1</sup> of this title, for the fiscal year ending September 30, 1984, \$3,705,000, and for the fiscal year ending September 30, 1985, \$6,096,000.

(6) There are authorized to be appropriated to the Director, to carry out the provisions of sec-

<sup>1</sup> See References in Text note below.

tions 7704 and 7705<sup>1</sup> of this title, for the fiscal year ending September 30, 1986, \$5,596,000, and for the fiscal year ending September 30, 1987, \$5,848,000.

(7) There are authorized to be appropriated to the Administrator of the Agency, to carry out this chapter, \$5,778,000 for the fiscal year ending September 30, 1988, \$5,788,000 for the fiscal year ending September 30, 1989, \$8,798,000 for the fiscal year ending September 30, 1990, \$14,750,000 for the fiscal year ending September 30, 1991, \$19,000,000 for the fiscal year ending September 30, 1992, \$22,000,000 for the fiscal year ending September 30, 1993, \$25,000,000 for the fiscal year ending September 30, 1995, \$25,750,000 for the fiscal year ending September 30, 1996, \$20,900,000 for the fiscal year ending September 30, 1998, \$21,500,000 for the fiscal year ending September 30, 1999; \$19,861,000 for the fiscal year ending September 30, 2001, of which \$450,000 is for National Earthquake Hazard Reduction Program-eligible efforts of an established multi-state consortium to reduce the unacceptable threat of earthquake damages in the New Madrid seismic region through efforts to enhance preparedness, response, recovery, and mitigation; \$20,705,000 for the fiscal year ending September 30, 2002; and \$21,585,000 for the fiscal year ending September 30, 2003.

(8) There are authorized to be appropriated to the Federal Emergency Management Agency for carrying out this chapter—

- (A) \$21,000,000 for fiscal year 2005,
- (B) \$21,630,000 for fiscal year 2006,
- (C) \$22,280,000 for fiscal year 2007,
- (D) \$22,950,000 for fiscal year 2008, and
- (E) \$23,640,000 for fiscal year 2009,

of which not less than 10 percent of available program funds actually appropriated shall be made available each such fiscal year for supporting the development of performance-based, cost-effective, and affordable design guidelines and methodologies in codes for buildings, structures, and lifelines.

#### (b) United States Geological Survey

(1) There are authorized to be appropriated to the Secretary of the Interior for purposes for carrying out, through the Director of the United States Geological Survey, the responsibilities that may be assigned to the Director under this chapter not to exceed \$27,500,000 for the fiscal year ending September 30, 1978; not to exceed \$35,000,000 for the fiscal year ending September 30, 1979; not to exceed \$40,000,000 for the fiscal year ending September 30, 1980; \$32,484,000 for the fiscal year ending September 30, 1981; \$34,425,000 for the fiscal year ending September 30, 1982; \$31,843,000 for the fiscal year ending September 30, 1983; \$35,524,000 for the fiscal year ending September 30, 1984; \$37,300,200 for the fiscal year ending September 30, 1985<sup>2</sup> \$35,578,000 for the fiscal year ending September 30, 1986; \$37,179,000 for the fiscal year ending September 30, 1987; \$38,540,000 for the fiscal year ending September 30, 1988; \$41,819,000 for the fiscal year ending September 30, 1989; \$55,283,000 for the fiscal year ending September 30, 1990, of which \$8,000,000 shall be for earthquake investigations

under section 7705e of this title; \$50,000,000 for the fiscal year ending September 30, 1991; \$54,500,000 for the fiscal year ending September 30, 1992; \$62,500,000 for the fiscal year ending September 30, 1993; \$49,200,000 for the fiscal year ending September 30, 1995; \$50,676,000 for the fiscal year ending September 30, 1996; \$52,565,000 for the fiscal year ending September 30, 1998, of which \$3,800,000 shall be used for the Global Seismic Network operated by the Agency; and \$54,052,000 for the fiscal year ending September 30, 1999, of which \$3,800,000 shall be used for the Global Seismic Network operated by the Agency. There are authorized to be appropriated to the Secretary of the Interior for purposes of carrying out, through the Director of the United States Geological Survey, the responsibilities that may be assigned to the Director under this chapter \$48,360,000 for fiscal year 2001, of which \$3,500,000 is for the Global Seismic Network and \$100,000 is for the Scientific Earthquake Studies Advisory Committee established under section 7709 of this title; \$50,415,000 for fiscal year 2002, of which \$3,600,000 is for the Global Seismic Network and \$100,000 is for the Scientific Earthquake Studies Advisory Committee; and \$52,558,000 for fiscal year 2003, of which \$3,700,000 is for the Global Seismic Network and \$100,000 is for the Scientific Earthquake Studies Advisory Committee. Of the amounts authorized to be appropriated under this paragraph, at least—

- (A) \$8,000,000 of the amount authorized to be appropriated for the fiscal year ending September 30, 1998;
- (B) \$8,250,000 of the amount authorized for the fiscal year ending September 30, 1999;
- (C) \$9,000,000 of the amount authorized to be appropriated for fiscal year 2001;
- (D) \$9,250,000 of the amount authorized to be appropriated for fiscal year 2002; and
- (E) \$9,500,000 of the amount authorized to be appropriated for fiscal year 2003,

shall be used for carrying out a competitive, peer-reviewed program under which the Director, in close coordination with and as a complement to related activities of the United States Geological Survey, awards grants to, or enters into cooperative agreements with, State and local governments and persons or entities from the academic community and the private sector.

(2) There are authorized to be appropriated to the United States Geological Survey for carrying out this chapter—

- (A) \$77,000,000 for fiscal year 2005, of which not less than \$30,000,000 shall be made available for completion of the Advanced National Seismic Research and Monitoring System established under section 7707 of this title;
- (B) \$84,410,000 for fiscal year 2006, of which not less than \$36,000,000 shall be made available for completion of the Advanced National Seismic Research and Monitoring System established under section 7707 of this title;
- (C) \$85,860,000 for fiscal year 2007, of which not less than \$36,000,000 shall be made available for completion of the Advanced National Seismic Research and Monitoring System established under section 7707 of this title;
- (D) \$87,360,000 for fiscal year 2008, of which not less than \$36,000,000 shall be made avail-

<sup>2</sup> So in original. Probably should be followed by a semicolon.

able for completion of the Advanced National Seismic Research and Monitoring System established under section 7707 of this title; and

(E) \$88,900,000 for fiscal year 2009, of which not less than \$36,000,000 shall be made available for completion of the Advanced National Seismic Research and Monitoring System established under section 7707 of this title.

**(c) National Science Foundation**

(1) To enable the Foundation to carry out responsibilities that may be assigned to it under this chapter, there are authorized to be appropriated to the Foundation not to exceed \$27,500,000 for the fiscal year ending September 30, 1978; not to exceed \$35,000,000 for the fiscal year ending September 30, 1979; not to exceed \$40,000,000 for the fiscal year ending September 30, 1980; \$26,600,000 for the fiscal year ending September 30, 1981; \$27,150,000 for the fiscal year ending September 30, 1982; \$25,000,000 for the fiscal year ending September 30, 1983; \$25,800,000 for the fiscal year ending September 30, 1984; \$28,665,000 for the fiscal year ending September 30, 1985<sup>2</sup> \$27,760,000 for the fiscal year ending September 30, 1986; \$29,009,000 for the fiscal year ending September 30, 1987; \$28,235,000 for the fiscal year ending September 30, 1988; \$31,634,000 for the fiscal year ending September 30, 1989; \$38,454,000 for the fiscal year ending September 30, 1990. Of the amounts authorized for Engineering under section 101(d)(1)(B) of the National Science Foundation Authorization Act of 1988, \$24,000,000 is authorized for carrying out this chapter for the fiscal year ending September 30, 1991, and of the amounts authorized for Geosciences<sup>3</sup> under section 101(d)(1)(D) of the National Science Foundation Authorization Act of 1988, \$13,000,000 is authorized for carrying out this chapter for the fiscal year ending September 30, 1991. Of the amounts authorized for Research and Related Activities under section 101(e)(1) of the National Science Foundation Authorization Act of 1988, \$29,000,000 is authorized for engineering research under this chapter, and \$14,750,000 is authorized for geosciences research under this chapter, for the fiscal year ending September 30, 1992. Of the amounts authorized for Research and Related Activities under section 101(f)(1) of the National Science Foundation Authorization Act of 1988, \$34,500,000 is authorized for engineering research under this chapter, and \$17,500,000 is authorized for geosciences research under this chapter, for the fiscal year ending September 30, 1993. There are authorized to be appropriated, out of funds otherwise authorized to be appropriated to the National Science Foundation: (1) \$16,200,000 for engineering research and \$10,900,000 for geosciences research for the fiscal year ending September 30, 1995, (2) \$16,686,000 for engineering research and \$11,227,000 for geosciences research for the fiscal year ending September 30, 1996, (3) \$18,450,000 for engineering research and \$11,920,000 for geosciences research for the fiscal year ending September 30, 1998, (4) \$19,000,000 for engineering research and \$12,280,000 for geosciences research for the fiscal year ending September 30, 1999. There are authorized to be appropriated to the

National Science Foundation \$19,000,000 for engineering research and \$11,900,000 for geosciences research for fiscal year 2001; \$19,808,000 for engineering research and \$12,406,000 for geosciences research for fiscal year 2002; and \$20,650,000 for engineering research and \$12,933,000 for geosciences research for fiscal year 2003.

(2) There are authorized to be appropriated to the National Science Foundation for carrying out this chapter—

- (A) \$38,000,000 for fiscal year 2005;
- (B) \$39,140,000 for fiscal year 2006;
- (C) \$40,310,000 for fiscal year 2007;
- (D) \$41,520,000 for fiscal year 2008; and
- (E) \$42,770,000 for fiscal year 2009.

**(d) National Institute of Standards and Technology**

(1) To enable the National Institute of Standards and Technology to carry out responsibilities that may be assigned to it under this chapter, there are authorized to be appropriated \$425,000 for the fiscal year ending September 30, 1981; \$425,000 for the fiscal year ending September 30, 1982; \$475,000 for the fiscal year ending September 30, 1983; \$475,000 for the fiscal year ending September 30, 1984; \$498,750 for the fiscal year ending September 30, 1985<sup>2</sup> \$499,000 for the fiscal year ending September 30, 1986; \$521,000 for the fiscal year ending September 30, 1987; \$525,000 for the fiscal year ending September 30, 1988; \$525,000 for the fiscal year ending September 30, 1989; \$2,525,000 for the fiscal year ending September 30, 1990; \$1,000,000 for the fiscal year ending September 30, 1991; \$3,000,000 for the fiscal year ending September 30, 1992; and \$4,750,000 for the fiscal year ending September 30, 1993. There are authorized to be appropriated, out of funds otherwise authorized to be appropriated to the National Institute of Standards and Technology, \$1,900,000 for the fiscal year ending September 30, 1995, \$1,957,000 for the fiscal year ending September 30, 1996, \$2,000,000 for the fiscal year ending September 30, 1998, \$2,060,000 for the fiscal year ending September 30, 1999, \$2,332,000 for fiscal year 2001, \$2,431,000 for fiscal year 2002, and \$2,534,300 for fiscal year 2003.

(2) There are authorized to be appropriated to the National Institute of Standards and Technology for carrying out this chapter—

- (A) \$10,000,000 for fiscal year 2005,
- (B) \$11,000,000 for fiscal year 2006,
- (C) \$12,100,000 for fiscal year 2007,
- (D) \$13,310,000 for fiscal year 2008, and
- (E) \$14,640,000 for fiscal year 2009,

of which \$2,000,000 shall be made available each such fiscal year for supporting the development of performance-based, cost-effective, and affordable codes for buildings, structures, and lifelines.

(Pub. L. 95-124, § 12, formerly § 7, Oct. 7, 1977, 91 Stat. 1102; Pub. L. 96-472, title I, § 103, Oct. 19, 1980, 94 Stat. 2259; Pub. L. 97-80, title I, § 101, Nov. 20, 1981, 95 Stat. 1081; Pub. L. 97-464, title I, § 101, Jan. 12, 1983, 96 Stat. 2533; Pub. L. 98-241, title I, § 101, Mar. 22, 1984, 98 Stat. 95; Pub. L. 99-105, §§ 1-4, Sept. 30, 1985, 99 Stat. 475; Pub. L. 100-252, § 1, Feb. 29, 1988, 102 Stat. 18; Pub. L. 100-418, title V, § 5115(c), Aug. 23, 1988, 102 Stat. 1433; renumbered § 12 and amended Pub. L.

<sup>3</sup> So in original. Probably should not be capitalized.



101-614, §§7(1), 12, Nov. 16, 1990, 104 Stat. 3236, 3240; Pub. L. 103-374, §1, Oct. 19, 1994, 108 Stat. 3492; Pub. L. 105-47, §1, Oct. 1, 1997, 111 Stat. 1159; Pub. L. 106-503, title II, §§202(a), (b), (d), (e), 203, Nov. 13, 2000, 114 Stat. 2304, 2305; Pub. L. 108-360, title I, §104(a), Oct. 25, 2004, 118 Stat. 1674; Pub. L. 109-295, title VI, §612(c), Oct. 4, 2006, 120 Stat. 1410.)

## REFERENCES IN TEXT

Section 7705 of this title, referred to in subsec. (a)(1) to (6), was repealed by Pub. L. 105-47, §4, Oct. 1, 1997, 111 Stat. 1164.

This chapter, referred to in subsecs. (a)(8), (b)(2), (c)(2), and (d)(2), was in the original “this title”, and was translated as reading “this Act”, meaning Pub. L. 95-124, known as the Earthquake Hazards Reduction Act of 1977, to reflect the probable intent of Congress, because Pub. L. 95-124, which enacted this chapter, does not contain titles.

Section 101(d)(1)(B), (D), (e)(1), and (f)(1) of the National Science Foundation Authorization Act of 1988, referred to in subsec. (c)(1), is section 101(d)(1)(B), (D), (e)(1), and (f)(1) of Pub. L. 100-570, Oct. 31, 1988, 102 Stat. 2865, 2866, which is not classified to the Code.

## AMENDMENTS

2004—Subsec. (a)(8). Pub. L. 108-360, §104(a)(1), added par. (8).

Subsec. (b). Pub. L. 108-360, §104(a)(2)–(5), designated existing provisions as par. (1) and substituted “paragraph” for “subsection” in last sentence, redesignated former pars. (1) to (5) as subpars. (A) to (E), respectively, and added par. (2).

Subsec. (c). Pub. L. 108-360, §104(a)(6), (7), designated existing provisions as par. (1) and added par. (2).

Subsec. (d). Pub. L. 108-360, §104(a)(8), (9), designated existing provisions as par. (1) and added par. (2).

2000—Subsec. (a)(7). Pub. L. 106-503, §202(a), struck out “and” after “1998,” and substituted “1999; \$19,861,000 for the fiscal year ending September 30, 2001, of which \$450,000 is for National Earthquake Hazard Reduction Program-eligible efforts of an established multi-state consortium to reduce the unacceptable threat of earthquake damages in the New Madrid seismic region through efforts to enhance preparedness, response, recovery, and mitigation; \$20,705,000 for the fiscal year ending September 30, 2002; and \$21,585,000 for the fiscal year ending September 30, 2003.” for “1999.”

Subsec. (b). Pub. L. 106-503, §202(b)(1), in introductory provisions, inserted after “operated by the Agency.” “There are authorized to be appropriated to the Secretary of the Interior for purposes of carrying out, through the Director of the United States Geological Survey, the responsibilities that may be assigned to the Director under this chapter \$48,360,000 for fiscal year 2001, of which \$3,500,000 is for the Global Seismic Network and \$100,000 is for the Scientific Earthquake Studies Advisory Committee established under section 7709 of this title; \$50,415,000 for fiscal year 2002, of which \$3,600,000 is for the Global Seismic Network and \$100,000 is for the Scientific Earthquake Studies Advisory Committee; and \$52,558,000 for fiscal year 2003, of which \$3,700,000 is for the Global Seismic Network and \$100,000 is for the Scientific Earthquake Studies Advisory Committee.”

Subsec. (b)(3) to (5). Pub. L. 106-503, §202(b)(2)–(4), added pars. (3) to (5).

Subsec. (c). Pub. L. 106-503, §202(d), struck out “and” after “1998,” and inserted at end “There are authorized to be appropriated to the National Science Foundation \$19,000,000 for engineering research and \$11,900,000 for geosciences research for fiscal year 2001; \$19,808,000 for engineering research and \$12,406,000 for geosciences research for fiscal year 2002; and \$20,650,000 for engineering research and \$12,933,000 for geosciences research for fiscal year 2003.”

Subsec. (d). Pub. L. 106-503, §202(e), struck out “and” after “1998,” and substituted “1999, \$2,332,000 for fiscal

year 2001, \$2,431,000 for fiscal year 2002, and \$2,534,300 for fiscal year 2003.” for “1999.”

Subsecs. (e), (f). Pub. L. 106-503, §203, struck out subsecs. (e) and (f), which related, respectively, to funds for certain required adjustments and availability of funds.

1997—Subsec. (a)(7). Pub. L. 105-47, §1(1), struck out “and” after “1995,” and inserted before period at end “, \$20,900,000 for the fiscal year ending September 30, 1998, and \$21,500,000 for the fiscal year ending September 30, 1999”.

Subsec. (b). Pub. L. 105-47, §1(2), substituted “\$50,676,000 for the fiscal year ending September 30, 1996; \$52,565,000 for the fiscal year ending September 30, 1998, of which \$3,800,000 shall be used for the Global Seismic Network operated by the Agency; and \$54,052,000 for the fiscal year ending September 30, 1999, of which \$3,800,000 shall be used for the Global Seismic Network operated by the Agency. Of the amounts authorized to be appropriated under this subsection, at least—

“(1) \$8,000,000 of the amount authorized to be appropriated for the fiscal year ending September 30, 1998; and

“(2) \$8,250,000 of the amount authorized for the fiscal year ending September 30, 1999,

shall be used for carrying out a competitive, peer-reviewed program under which the Director, in close coordination with and as a complement to related activities of the United States Geological Survey, awards grants to, or enters into cooperative agreements with, State and local governments and persons or entities from the academic community and the private sector.” for “and \$50,676,000 for the fiscal year ending September 30, 1996.”

Subsec. (c). Pub. L. 105-47, §1(3), struck out “and” after “September 30, 1995,” and inserted before period at end “, (3) \$18,450,000 for engineering research and \$11,920,000 for geosciences research for the fiscal year ending September 30, 1998, and (4) \$19,000,000 for engineering research and \$12,280,000 for geosciences research for the fiscal year ending September 30, 1999”.

Subsec. (d). Pub. L. 105-47, §1(4), struck out “and” after “September 30, 1995,” and inserted before period at end “, \$2,000,000 for the fiscal year ending September 30, 1998, and \$2,060,000 for the fiscal year ending September 30, 1999”.

1994—Subsec. (a)(7). Pub. L. 103-374, §1(1), inserted “of the Agency” after “to the Director”, struck out “and” after “September 30, 1992,” and inserted before period at end “, \$25,000,000 for the fiscal year ending September 30, 1995, and \$25,750,000 for the fiscal year ending September 30, 1996” after “September 30, 1993”.

Subsec. (b). Pub. L. 103-374, §1(2), struck out “and” after “September 30, 1992;” and inserted before period at end “; \$49,200,000 for the fiscal year ending September 30, 1995; and \$50,676,000 for the fiscal year ending September 30, 1996”.

Subsec. (c). Pub. L. 103-374, §1(3), inserted at end “There are authorized to be appropriated, out of funds otherwise authorized to be appropriated to the National Science Foundation: (1) \$16,200,000 for engineering research and \$10,900,000 for geosciences research for the fiscal year ending September 30, 1995, and (2) \$16,686,000 for engineering research and \$11,227,000 for geosciences research for the fiscal year ending September 30, 1996.”

Subsec. (d). Pub. L. 103-374, §1(4), inserted at end “There are authorized to be appropriated, out of funds otherwise authorized to be appropriated to the National Institute of Standards and Technology, \$1,900,000 for the fiscal year ending September 30, 1995, and \$1,957,000 for the fiscal year ending September 30, 1996.”

1990—Subsec. (a)(7). Pub. L. 101-614, §12(1), substituted “carry out this chapter” for “carry out the provisions of sections 7704 and 7705 of this title”, substituted “\$8,798,000” for “and \$5,798,000”, and inserted before period at end “, \$14,750,000 for the fiscal year ending September 30, 1991, \$19,000,000 for the fiscal year ending September 30, 1992, and \$22,000,000 for the fiscal year ending September 30, 1993”.

Subsec. (b). Pub. L. 101-614, §12(2), substituted “\$55,283,000” for “and \$43,283,000” and inserted before period at end “, of which \$8,000,000 shall be for earthquake investigations under section 7705e of this title; \$50,000,000 for the fiscal year ending September 30, 1991; \$54,500,000 for the fiscal year ending September 30, 1992; and \$62,500,000 for the fiscal year ending September 30, 1993”.

Subsec. (c). Pub. L. 101-614, §12(3), substituted “\$38,454,000” for “and \$35,454,000” and inserted at end “Of the amounts authorized for Engineering under section 101(d)(1)(B) of the National Science Foundation Authorization Act of 1988, \$24,000,000 is authorized for carrying out this chapter for the fiscal year ending September 30, 1991, and of the amounts authorized for Geosciences under section 101(d)(1)(D) of the National Science Foundation Authorization Act of 1988, \$13,000,000 is authorized for carrying out this chapter for the fiscal year ending September 30, 1991. Of the amounts authorized for Research and Related Activities under section 101(e)(1) of the National Science Foundation Authorization Act of 1988, \$29,000,000 is authorized for engineering research under this chapter, and \$14,750,000 is authorized for geosciences research under this chapter, for the fiscal year ending September 30, 1992. Of the amounts authorized for Research and Related Activities under section 101(f)(1) of the National Science Foundation Authorization Act of 1988, \$34,500,000 is authorized for engineering research under this chapter, and \$17,500,000 is authorized for geosciences research under this chapter, for the fiscal year ending September 30, 1993.”

Subsec. (d). Pub. L. 101-614, §12(4), substituted “National Institute of Standards and Technology” for “National Bureau of Standards” in heading and for “Bureau” in text, substituted “\$2,525,000” for “and \$525,000”, and inserted before period at end “; \$1,000,000 for the fiscal year ending September 30, 1991; \$3,000,000 for the fiscal year ending September 30, 1992; and \$4,750,000 for the fiscal year ending September 30, 1993”.

Subsec. (f). Pub. L. 101-614, §12(5), added subsec. (f).  
1988—Subsec. (a)(2)(G). Pub. L. 100-418 substituted “Institute” for “Bureau”.

Subsec. (a)(7). Pub. L. 100-252, §1(a), added par. (7).  
Subsec. (b). Pub. L. 100-252, §1(b), struck out “and” after “1986;” and inserted “; \$38,540,000 for the fiscal year ending September 30, 1988; \$41,819,000 for the fiscal year ending September 30, 1989; and \$43,283,000 for the fiscal year ending September 30, 1990”.

Subsec. (c). Pub. L. 100-252, §1(c), struck out “and” after “1986;” and inserted “; \$28,235,000 for the fiscal year ending September 30, 1988; \$31,634,000 for the fiscal year ending September 30, 1989; and \$35,454,000 for the fiscal year ending September 30, 1990”.

Subsec. (d). Pub. L. 100-252, §1(d), struck out “and” after “1986;” and inserted “; \$525,000 for the fiscal year ending September 30, 1988; \$525,000 for the fiscal year ending September 30, 1989; and \$525,000 for the fiscal year ending September 30, 1990”.

1985—Subsec. (a)(6). Pub. L. 99-105, §1, added par. (6).

Subsec. (b). Pub. L. 99-105, §2, substituted a semicolon for “, and” after “1984” and inserted “\$35,578,000 for the fiscal year ending September 30, 1986; and \$37,179,000 for the fiscal year ending September 30, 1987”.

Subsec. (c). Pub. L. 99-105, §3, struck out “and” after “1984;” and inserted “\$27,760,000 for the fiscal year ending September 30, 1986; and \$20,009,000 for the fiscal year ending September 30, 1987”.

Subsec. (d). Pub. L. 99-105, §4, struck out “and” after “1984;” and inserted “\$499,000 for the fiscal year ending September 30, 1986; and \$521,000 for the fiscal year ending September 30, 1987”.

1984—Subsec. (a). Pub. L. 98-241, §101(a), added par. (5).

Subsec. (b). Pub. L. 98-241, §101(b), struck out “and” after “1982;” and inserted “; \$35,524,000 for the fiscal year ending September 30, 1984, and \$37,300,200 for the fiscal year ending September 30, 1985”.

Subsec. (c). Pub. L. 98-241, §101(c), struck out “and” after “1982;” and inserted “; \$25,800,000 for the fiscal

year ending September 30, 1984; and \$28,665,000 for the fiscal year ending September 30, 1985”.

Subsec. (d). Pub. L. 98-241, §101(d), struck out “and” after “1982;” and inserted “; \$475,000 for the fiscal year ending September 30, 1984; and \$498,750 for the fiscal year ending September 30, 1985”.

Subsec. (e). Pub. L. 98-241, §101(e), substituted “1982,” for “1982 and” and inserted “September 30, 1984, and September 30, 1985,”.

1983—Subsec. (a)(4). Pub. L. 97-464, §101(a), added par. (4).

Subsecs. (b) to (d). Pub. L. 97-464, §101(b)–(d), inserted authorization for fiscal year ending Sept. 30, 1983.

Subsec. (e). Pub. L. 97-464, §101(e), substituted “each of the fiscal years ending September 30, 1982 and September 30, 1983” for “the fiscal year ending September 30, 1982”.

1981—Subsec. (a)(3). Pub. L. 97-80, §101(a), added par. (3).

Subsecs. (b) to (d). Pub. L. 97-80, §101(b)–(d), inserted authorization for fiscal year ending Sept. 30, 1982.

Subsec. (e). Pub. L. 97-80, §101(e), added subsec. (e).  
1980—Subsec. (a). Pub. L. 96-472, §103(a), designated existing provisions as par. (1) and added par. (2).

Subsecs. (b), (c). Pub. L. 96-472, §103(b), (c), inserted authorization for fiscal year ending Sept. 30, 1981.

Subsec. (d). Pub. L. 96-472, §103(d), added subsec. (d).

#### CHANGE OF NAME

“Administrator of the Agency” substituted for “Director of the Agency” in subsec. (a)(7) on authority of section 612(c) of Pub. L. 109-295, set out as a note under section 313 of Title 6, Domestic Security. Any reference to the Administrator of the Federal Emergency Management Agency in title VI of Pub. L. 109-295 or an amendment by title VI to be considered to refer and apply to the Director of the Federal Emergency Management Agency until Mar. 31, 2007, see section 612(f)(2) of Pub. L. 109-295, set out as a note under section 313 of Title 6.

#### TRANSFER OF FUNCTIONS

For transfer of all functions, personnel, assets, components, authorities, grant programs, and liabilities of the Federal Emergency Management Agency, including the functions of the Under Secretary for Federal Emergency Management relating thereto, to the Federal Emergency Management Agency, see section 315(a)(1) of Title 6, Domestic Security.

For transfer of functions, personnel, assets, and liabilities of the Federal Emergency Management Agency, including the functions of the Director of the Federal Emergency Management Agency relating thereto, to the Secretary of Homeland Security, and for treatment of related references, see former section 313(1) and sections 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

### § 7707. Advanced National Seismic Research and Monitoring System

#### (a) Establishment

The Director of the United States Geological Survey shall establish and operate an Advanced National Seismic Research and Monitoring System. The purpose of such system shall be to organize, modernize, standardize, and stabilize the national, regional, and urban seismic monitoring systems in the United States, including sensors, recorders, and data analysis centers, into a coordinated system that will measure and record the full range of frequencies and amplitudes exhibited by seismic waves, in order to enhance earthquake research and warning capabilities.

**(b) Management plan**

Not later than 90 days after November 13, 2000, the Director of the United States Geological Survey shall transmit to the Congress a 5-year management plan for establishing and operating the Advanced National Seismic Research and Monitoring System. The plan shall include annual cost estimates for both modernization and operation, milestones, standards, and performance goals, as well as plans for securing the participation of all existing networks in the Advanced National Seismic Research and Monitoring System and for establishing new, or enhancing existing, partnerships to leverage resources. (Pub. L. 95-124, §13, as added Pub. L. 106-503, title II, §204, Nov. 13, 2000, 114 Stat. 2305; amended Pub. L. 108-360, title I, §104(b), Oct. 25, 2004, 118 Stat. 1675.)

## AMENDMENTS

2004—Subsec. (c). Pub. L. 108-360 struck out subsec. (c) which related to authorization of appropriations.

**§ 7708. Network for Earthquake Engineering Simulation****(a) Establishment**

The Director of the National Science Foundation shall establish the George E. Brown, Jr. Network for Earthquake Engineering Simulation that will upgrade, link, and integrate a system of geographically distributed experimental facilities for earthquake engineering testing of full-sized structures and their components and partial-scale physical models. The system shall be integrated through networking software so that integrated models and databases can be used to create model-based simulation, and the components of the system shall be interconnected with a computer network and allow for remote access, information sharing, and collaborative research.

**(b) Authorization of appropriations**

In addition to amounts appropriated under section 7706(c) of this title, there are authorized to be appropriated to the National Science Foundation for the George E. Brown, Jr. Network for Earthquake Engineering Simulation—

- (1) \$28,200,000 for fiscal year 2001;
- (2) \$24,400,000 for fiscal year 2002;
- (3) \$4,500,000 for fiscal year 2003;
- (4) \$17,000,000 for fiscal year 2004;
- (5) \$20,000,000 for fiscal year 2005, all of which shall be available for operations and maintenance;
- (6) \$20,400,000 for fiscal year 2006, all of which shall be available for operations and maintenance;
- (7) \$20,870,000 for fiscal year 2007, all of which shall be available for operations and maintenance;
- (8) \$21,390,000 for fiscal year 2008, all of which shall be available for operations and maintenance; and
- (9) \$21,930,000 for fiscal year 2009, all of which shall be available for operations and maintenance.

(Pub. L. 95-124, §14, as added Pub. L. 106-503, title II, §205, Nov. 13, 2000, 114 Stat. 2306; amended Pub. L. 108-360, title I, §104(c), Oct. 25, 2004, 118 Stat. 1675.)

## AMENDMENTS

2004—Subsec. (b)(5) to (9). Pub. L. 108-360 added pars. (5) to (9).

**§ 7709. Scientific Earthquake Studies Advisory Committee****(a) Establishment**

The Director of the United States Geological Survey shall establish a Scientific Earthquake Studies Advisory Committee.

**(b) Organization**

The Director shall establish procedures for selection of individuals not employed by the Federal Government who are qualified in the seismic sciences and other appropriate fields and may, pursuant to such procedures, select up to 10 individuals, one of whom shall be designated Chairman, to serve on the Advisory Committee. Selection of individuals for the Advisory Committee shall be based solely on established records of distinguished service, and the Director shall ensure that a reasonable cross-section of views and expertise is represented. In selecting individuals to serve on the Advisory Committee, the Director shall seek and give due consideration to recommendations from the National Academy of Sciences, professional societies, and other appropriate organizations.

**(c) Meetings**

The Advisory Committee shall meet at such times and places as may be designated by the Chairman in consultation with the Director.

**(d) Duties**

The Advisory Committee shall advise the Director on matters relating to the United States Geological Survey's participation in the National Earthquake Hazards Reduction Program, including the United States Geological Survey's roles, goals, and objectives within that Program, its capabilities and research needs, guidance on achieving major objectives, and establishing and measuring performance goals. The Advisory Committee shall issue an annual report to the Director for submission to Congress on or before September 30 of each year. The report shall describe the Advisory Committee's activities and address policy issues or matters that affect the United States Geological Survey's participation in the National Earthquake Hazards Reduction Program.

(Pub. L. 106-503, title II, §210, Nov. 13, 2000, 114 Stat. 2308.)

## CODIFICATION

Section was enacted as part of the Earthquake Hazards Reduction Authorization Act of 2000, and not as part of the Earthquake Hazards Reduction Act of 1977 which comprises this chapter.

## TERMINATION OF ADVISORY COMMITTEES

Advisory committees established after Jan. 5, 1973, to terminate not later than the expiration of the 2-year period beginning on the date of their establishment, unless, in the case of a committee established by the President or an officer of the Federal Government, such committee is renewed by appropriate action prior to the expiration of such 2-year period, or in the case of a committee established by the Congress, its duration is otherwise provided for by law. See section 14 of Pub.

L. 92-463, Oct. 6, 1972, 86 Stat. 776, set out in the Appendix to Title 5, Government Organization and Employees.

## CHAPTER 87—WATER RESEARCH AND DEVELOPMENT

### §§ 7801, 7802. Repealed. Pub. L. 98-242, title I, § 110(a), Mar. 22, 1984, 98 Stat. 101

Section 7801, Pub. L. 95-467, §2, Oct. 17, 1978, 92 Stat. 1305, set out Congressional findings and declarations for a water research and development program.

Section 7802, Pub. L. 95-467, §3, Oct. 17, 1978, 92 Stat. 1305, set out Congressional statement of purpose.

For similar provisions, see section 10301 et seq. of this title.

#### SAVINGS PROVISION

Section 110(b) of Pub. L. 98-242 provided that: "Rules and regulations issued prior to the date of enactment of this Act [Mar. 22, 1984] under the authority of Public Law 95-467 [this chapter] shall remain in full force and effect under this Act [repealing this chapter and enacting chapter 109 (§10301 et seq.) of this title] until superseded by new rules and regulations promulgated under this Act."

#### SHORT TITLE

Section 1 of Pub. L. 95-467, which provided that Pub. L. 95-467 was to be cited as the "Water Research and Development Act of 1978", was repealed by section 110(a) of Pub. L. 98-242.

## SUBCHAPTER I—WATER RESOURCES RESEARCH AND DEVELOPMENT

### §§ 7811 to 7819. Repealed. Pub. L. 98-242, title I, § 110(a), Mar. 22, 1984, 98 Stat. 101

Section 7811, Pub. L. 95-467, title I, §101, Oct. 17, 1978, 92 Stat. 1306, related to establishment of research and technology institutes.

Section 7812, Pub. L. 95-467, title I, §102, Oct. 17, 1978, 92 Stat. 1307, authorized use of appropriated funds for printing and publishing of program results, and planning, coordinating, and conducting of cooperative research.

Section 7813, Pub. L. 95-467, title I, §103, Oct. 17, 1978, 92 Stat. 1308, set out responsibilities of Secretary of the Interior in prescribing procedures, rules, and regulations, and in developing a 5-year water resource research program.

Section 7814, Pub. L. 95-467, title I, §104, Oct. 17, 1978, 92 Stat. 1308, related to non-impairment of legal relationship between State governments and educational institutions involved in water research and to prohibition with regard to any Federal control of educational institutions.

Section 7815, Pub. L. 95-467, title I, §105, Oct. 17, 1978, 92 Stat. 1308, provided for making of grants and contracts.

Section 7816, Pub. L. 95-467, title I, §106, Oct. 17, 1978, 92 Stat. 1309, set out range of program issues and provided for due consideration to be given to priority problems.

Section 7817, Pub. L. 95-467, title I, §107, Oct. 17, 1978, 92 Stat. 1309, defined "State".

Section 7818, Pub. L. 95-467, title I, §108, Oct. 17, 1978, 92 Stat. 1309, authorized advance payment of initial expenses.

Section 7819, Pub. L. 95-467, title I, §109, Oct. 17, 1978, 92 Stat. 1309, provided for study and design of water resources programs and activities and for reports to Congress.

For similar provisions, see section 10301 et seq. of this title.

## SUBCHAPTER II—WATER RESEARCH AND DEVELOPMENT FOR SALINE AND OTHER IMPAIRED WATERS

### §§ 7831 to 7835. Repealed. Pub. L. 98-242, title I, § 110(a), Mar. 22, 1984, 98 Stat. 101

Section 7831, Pub. L. 95-467, title II, §200, Oct. 17, 1978, 92 Stat. 1310, set out Congressional findings and declaration of policy in establishing a program for water research and development for saline and other impaired waters.

Section 7832, Pub. L. 95-467, title II, §201, Oct. 17, 1978, 92 Stat. 1310, set out functions of the Secretary.

Section 7833, Pub. L. 95-467, title II, §202, Oct. 17, 1978, 92 Stat. 1310, set out additional functions of the Secretary with regard to demonstrations and prototype plants, utilization of Federal expertise, and financial assistance from State or public agencies.

Section 7834, Pub. L. 95-467, title II, §203, Oct. 17, 1978, 92 Stat. 1311, authorized the Secretary to issue rules and regulations to carry out this subchapter.

Section 7835, Pub. L. 95-467, title II, §204, Oct. 17, 1978, 92 Stat. 1311, defined "saline and other impaired water", "United States", "pilot plant", "demonstration", and "prototype".

For similar provisions, see section 10301 et seq. of this title.

### § 7836. Transferred

#### CODIFICATION

Section, Pub. L. 95-84, §2, Aug. 2, 1977, 91 Stat. 400; Pub. L. 95-467, title II, §205(a), (b), Oct. 17, 1978, 92 Stat. 1311; Pub. L. 96-457, §3, Oct. 15, 1980, 94 Stat. 2032; Pub. L. 98-242, title I, §110(a), Mar. 22, 1984, 98 Stat. 101, which directed Secretary of the Interior to construct facilities demonstrating the engineering and economic viability of various desalting processes, was transferred, and is set out as a Desalting Plants note under section 10301 of this title.

#### ADDITIONAL AUTHORIZATION OF APPROPRIATIONS

Section 205(c) of Pub. L. 95-467, which authorized an appropriation of \$10,000,000 to remain available until expended for the fiscal year ending Sept. 30, 1980, and thereafter in addition to sums previously authorized to be appropriated to carry out the purpose of this section, was repealed by Pub. L. 96-457, §4, Oct. 15, 1980, 94 Stat. 2034, and Pub. L. 98-242, title I, §110(a), Mar. 22, 1984, 98 Stat. 101.

## SUBCHAPTER III—TECHNOLOGY TRANSFER AND INFORMATION DISSEMINATION

### §§ 7851 to 7853. Repealed. Pub. L. 98-242, title I, § 110(a), Mar. 22, 1984, 98 Stat. 101

Section 7851, Pub. L. 95-467, title III, §300, Oct. 17, 1978, 92 Stat. 1312, provided for creation and operation of a research assessment and technology transfer program.

Section 7852, Pub. L. 95-467, title III, §301, Oct. 17, 1978, 92 Stat. 1312, authorized the Secretary to maintain a national center for acquisition, processing, and dissemination of information dealing with all areas of water research.

Section 7853, Pub. L. 95-467, title III, §302, Oct. 17, 1978, 92 Stat. 1312, provided for establishment of a center for cataloging current scientific research in all fields of water resources.

For similar provisions, see section 10301 et seq. of this title.

## SUBCHAPTER IV—GENERAL PROVISIONS

### §§ 7871 to 7883. Repealed. Pub. L. 98-242, title I, § 110(a), Mar. 22, 1984, 98 Stat. 101

Section 7871, Pub. L. 95-467, title IV, §400, Oct. 17, 1978, 92 Stat. 1313, enumerated powers of Secretary of the Interior in carrying out this chapter.